Department of AGRICULTURE FISHERIES & FORESTRY - AUSTRALIA

PBR

Plant Varieties Journal

Quarter Three 2000 Volume 13 Number 3

'Korlekaf' – A new cut flower variety

AGRICULTURE, FISHERIES AND FORESTRY - AUSTRALIA

Treloar ROSES

Treloars are the Australian Agent for W. Kordes & Sons of Germany, who are recognised worldwide as leaders in producing new garden and cut flower varieties.

The following Kordes varieties are protected under Plant Breeders Rights:

Variety	*Synonym*	*Type*	*Applic No.*
KORSCHWAMA	Black Madonna	Hybrid Tea	94/094
KORCRISETT	Calibra	Cut Flower	94/090
KOROMTAR	Cream Dream	Cut Flower	97/204
KORSORB	Cubana	Cut Flower	91/052
KORMILLER	Dream	Cut Flower	96/076
KORTANKEN	Domstadt Fulda	Floribunda	96/082
KORILIS	Eliza	Cut Flower	96/077
KORAZERKA	Ekstase	Hybrid Tea	96/078
KORGENOMA	Emely	Cut Flower	97/207
KORCILMO	Escimo	Cut Flower	94/093
KORFISCHER	Hansa-Park	Shrub	96/085
KOROKIS	Kiss	Cut Flower	89/132
KORVERPEA	Kleopatra	Hybrid Tea	96/084
KORDABA	Lambada	Cut Flower	94/089
KORSULAS	Limona	Cut Flower	97/203
KORBOLAK	Melody	Cut Flower	89/129
KORRUICIL	Our Esther	Cut Flower	97/205
KORANDERER	Our Copper Queen	Hybrid Tea	97/201
SPEKES	Our Sacha	Cut Flower	96/080
KORPLASINA	Our Vanilla	Cut Flower	96/081
KORBASREN	Pink Bassino	Ground Cover	96/087
KORMAREC	Sommerabend	Ground Cover	96/086
KORPINKA	Summer Fairytale	Ground Cover	94/088
KORVESTAVI	Sunny Sky	Cut Flower	97/200
KORMADOR	Tamara	Cut Flower	89/131
KORBACOL	Texas	Cut Flower	94/092
KORKUNDE	Toscana	Cut Flower	89/130
KORHOCO	Vital	Cut Flower	97/206
KORDREKES		Cut Flower	99/204
KORFLEUR		Cut Flower	99/201
KORKULARIS		Cut Flower	99/202
KORLUMARA		Cut Flower	99/199
KORMEERAM		Cut Flower	99/200
KORROGILO		Cut Flower	99/105
KORSETAG		Cut Flower	99/203

Please contact us for further information on these excellent new varieties

Treloar ROSES

"Midwood", Portland VIC 3305. Phone: (03) 5529 2367. Fax: (03) 5529 2511

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Plant Varieties Journal

Official Journal of Plant Breeders Rights Australia

QUARTER THREE, 2000 **VOLUME 13 NUMBER 3**

Part 1 – General Information

Part 2 – Public Notices

SUBSCRIPTION ENQUIRIES AND ADVERTISING SHOULD BE ADDRESSED TO:
PLANT BREEDERS RIGHTS AUSTRALIA
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858, Canberra ACT 2601
Telephone: (02) 6272 4228 Facsimile: (02) 6272 3650
Website: http://www.affa.gov.au/pbr

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Plant Breeders Rights Australia (PBRA) is an agency within the Commonwealth Department of Agriculture, Fisheries and Forestry – Australia

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Part 1 – General Information

Objections to Applications and Requests for Revocation of a Grant or of a Declaration that a Plant Variety is Essentially Derived from Another Plant Variety

The Plant Breeder's Rights scheme is administered consistent with the model law of *the International Convention for the Protection of New Plant Varieties 1991 (UPOV 91)*, that is, applicants are entitled to protection, in the absence of proof to the contrary.

The Plant Breeder's Rights Office (PBRO) is not required to prove the views, assertions, and opinions of persons challenging protection for plant varieties. Those objecting to/commenting on applications or requesting/commenting on revocation of a grant or declaration that a plant variety is essentially derived from another plant variety must provide conclusive supporting evidence why their objection/comment/-request should be upheld. It cannot be stressed too strongly that conclusive argumentation should be provided from the outset.

Objections to Applications

A person may make objections to applications for PBR if (i) their commercial interests would be affected adversely, and (ii) the application will not fulfil all the conditions required by the *Plant Breeder's Rights Act.*

Objections to applications must be lodged with the Registrar no later than six months after the date the description of the variety is published in this journal. The objector must provide evidence of adverse affect on their commercial interests and that the application should not be granted.

The Registrar of the Plant Breeder's Rights Office (PBRO) is required to give a copy of the objection to the applicant. The objection is also available to the general public on request. The applicant has the opportunity to respond to the evidence presented. The Registrar then decides whether or not the objection will be upheld and, subsequently, whether the application will be granted. The PBRO is under no obligation to enter into further dialogue regarding an objection or to communicate reasons why an objection is not upheld. If an objection is upheld it will be notified in this journal.

A payment of $100 is required on lodgement of the objection. Additional costs of $75 per hour for work undertaken in relation to the objection will be billed to the objector.

Comments on Applications
The PBRO accepts comments on applications. However, the scheme is managed on normal risk management lines and with an emphasis on the requirement that challengers with a commercial interest must demonstrate conclusively that an application should not be granted.

All written comment will be acknowledged. The PBRO is under no obligation to enter into further communication regarding comments. If an application does not proceed to a grant it will be notified in this journal.

Requests for Revocation, (where an individual's interests are affected) of:

- a Grant
- a Declaration that a Plant Variety is Essentially Derived

A person may, when their interests are affected adversely, apply for the revocation of:

- a grant of PBR; or
- a declaration that a plant variety is essentially derived from another plant variety.

The person requesting revocation is required to lodge a revocation payment fee of $500. The person seeking revocation of a grant or declaration that a plant variety is essentially derived from another plant, must provide conclusive evidence of adverse affect on their interests and that the grant should be revoked.

The PBRO also accepts information regarding revocation of grants and declarations of essentially derived plant varieties. Such information must demonstrate conclusively that a grant or declaration should not have been made. All written information will be acknowledged. The PBRO is under no obligation to enter into further communication regarding information provided.

New Location for Plant Breeders Rights Website

The PBR website has moved. The new URL is http://www.affa.gov.au/pbr All previous information is retained in this new site. Please visit this site for important information on PBR in Australia, list of protected varieties and to download all relevant PBR forms.

Applying For Plant Breeders Rights

Applications are accepted from the original breeder of a new variety (from their employer if the breeder is an employee) or from a person who has acquired ownership

from the original breeder. Overseas breeders need to appoint an agent to represent their interests in Australia. Interested parties should contact the PBR office and an accredited Qualified Person (Appendix 3) experienced in the plant species in question.

Requirement to Supply Comparative Varieties

Once an application has been accepted by the PBR office, it is covered by provisional protection. Also it **immediately** becomes a 'variety of common knowledge' and thus may be required by others as a comparator for their applications with a higher application number.

Applicants are reminded that they are required to release propagative material for comparative testing provided that the material is used for no other purpose and all material relating to the variety is returned when the trial is complete. The expenses incurred in the provision of material for comparative trials is borne by those conducting the trials.

As the variety is already under provisional protection, any use outside the conditions outlined above would qualify as an infringement and would be dealt with under section 53 of the Plant Breeder's Rights Act.

Applicants having difficulties procuring varieties for use in comparative trials are urged to contact the PBR office immediately.

UPOV Developments

Information on UPOV and its activities is available on the INTERNET located at http://www.upov.int

Republic of Estonia became the forty-sixth member state of UPOV on September 24, 2000. The Act 1991 of the UPOV Convention has entered into force for Kyrgyz Republic from that date.

The complete list UPOV member states with their address and current status of ratification is given in Appendix 5.

Instruction to Authors: Format for Preparing Detailed Description for *Plant Varieties Journal*

A detailed description for the *Plant Varieties Journal* must be prepared under following headings:

- **Details of the Application**
- **Characteristics**
- **Origin and Breeding**
- **Choice of Comparator(s)**
- **Comparative Trial**
- **Prior Applications and Sales**
- **Name of the person who prepared the description**
- **Comparative Table**
- **At the discretion of the QP/Applicant, scientific papers and other relevant information/publications can be appended to the detailed description**

Please note that the PBR office retains editorial control for all published material. Accordingly there may be instances when non-critical portions of a description (eg particularly verbose methodologies or appendices) are not published, although they do remain part of the detailed description. In some cases some non-distinct characteristics presented in a table may be omitted for publication.

Following are some notes for preparing the descriptions under the above headings with some examples of style and format:

Details of the Application
This will include the correct botanical name; the common name of the species; name and synonym (if any) of the variety; application number and the acceptance date; details of the applicant; details of the agent (if any**).**

For consistency, botanical and common names should follow those of: *Hortus Third*, Staff of the LH Bailey Hortorium, Macmillan Publishing Company, 1976; *Census of Australian Vascular Plants*, RJ Hnatiuk, AGPS, 1990; *The Smart Gardeners Guide to Common Names of Plants*, M Adler, Rising Sun Press, 1994; *A Checklist of Economic Plants in Australia*, CSIRO, 1994; *Australian Plant Name Index,* Australian Biological Resources Study, AGPS, 1991.

Example 1

Genus species

Common name of the species
'Variety' syn **Synonym** (if applicable)
Application No: xxxx/xxx Accepted: dd month year.
Applicant: **Applicant's Name,** Town, State (abbreviation) and Country (if not Australia).
Agent: **Agent's Name,** Town, State (abbreviation).

Characteristics
Characteristics should be described in the following order: Plant, Stem, Leaf, Inflorescence, Flower and flower parts, Fruit and fruit parts, Seed, Other characters (disease resistance, stress tolerance, quality etc). Characters within subheadings should generally be in the following order: habit, height, length, width, size, shape, colour (RHS colour chart reference with edition), other. Use a concise taxonomic style in which subheadings are followed by a colon and characters are separated by a comma. Where there is a UPOV technical guideline available make sure that the asterisk characteristics are included in the description.

Example 2

Characteristics (Table nn, Figure nn) Plant: habit narrow bushy, height medium, early maturing. Stem: anthocyanin absent, internodes short. Leaf: length long, width narrow, variegation present, predominant colour green (RHS 137A), secondary margin colour pale green-yellow (RHS 1A). Inflorescence: corymb. Flower: early, pedicel short, diameter small (average 12.5mm), petals 5,

petal colour yellow (RHS 12A), sepals 5 …..etc (Note: give the reference for the edition of RHS colour chart used, eg. all RHS colour chart numbers refer to 1986 edition)

Origin and Breeding
Indicate how the variety was originated, ie. controlled pollination, open pollination, induced mutation, spontaneous mutation, introduction and selection, seedling selection etc. Give the name of the parents. Also give the characteristics of the parental material by which they differ from the candidate variety. Briefly describe the breeding procedure and selection criteria used in developing the new variety. Also indicate the mode of propagation used during breeding. Give the name(s) of the breeder.

Example 3

Origin and Breeding Controlled pollination : seed parent S90-502-1 x pollen parent S90-1202-1. The seed parent was characterised by early flowering, dark green non-variegated leaves and compact bushy habit. The pollen parent was characterised by late flowering, variegated leaves and narrow bushy habit. Hybridisation took place in <location>, <country> in <year>. From this cross, seedling number S 3736 was chosen in 1993 on the basis of flowering time. Selection criteria: variegated leaves, compact bushy habit and early flowering. Propagation: a number mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. The 'Variety' will be commercially propagated by vegetative cuttings from the stock plants. Breeder: <name>, <location>, <country>.

Example 4

Origin and Breeding Introduction and selection: 5 cycles of selection within <accession number> originating from <originating country> and supplied by the <company name> under a materials transfer agreement. When grown CI2204 was heterogeneous with both hooded and non-hooded types and differences in seed colour. Repeated selection for hooded types produced seven breeding lines (726.1-726.7) which were evaluated for forage and seed production potential. From these lines, an uniform single line known as 726.2.1 was selected to become 'Variety'. Selection criteria: seedling vigour, dry matter yield, uniformly hooded (awnless), seed colour (black). Propagation: by seed. Breeder: <name>, <location>, <country>.

Choice of Comparators
As choosing the most appropriate comparators may be the most crucial part of the trial, we suggest the QPs do more research and record their decisions before making the final selection. Under this heading briefly indicate what factors you have considered in choosing the comparator(s) for the trial. It is strongly recommended that the parental materials or the source germplasm is included in the trial for comparison purposes. If the parents are excluded indicate the reason(s).

Example 5

Choice of Comparators 'Comparator 1', 'Comparator 2' and 'Comparator 3' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Comparator 1' is a widely available commercial variety of the same species, however it has non variegated leaves. Therefore it was excluded from the trial. 'Comparator 2', was chosen for its variegated leaves and 'Comparator 3' was chosen for its compact growth habit and variegated leaves. The parents were not considered for the trial because the 'Variety' is clearly distinguishable from the seed parent by its variegated leaves and from the pollen parent by flowering time and growth habit.

Example 6

Choice of Comparators 'Comparator 1' was chosen because it is the original source material from which the variety was selected. Comparator 2' was selected for its similarity with the 'Variety' in seed colour. No other similar varieties of common knowledge have been identified.

Comparative Trial
State the location and date of the trial. Give relevant details on propagation, pot/plot size and type, growing medium, chemical treatments, lighting, irrigation, or management which may be necessary to repeat the trials. State the type of trial design used, the total number of specimens in the trial and how they were arranged. State the number of specimens from which measurements/observations were taken. Also indicate how the specimen was selected and the sampling regime.

Example 7

Comparative Trial Location: Carrum Downs, VIC (Latitude 38º06′ South, elevation 35m), summer-autumn 1996/97. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 210mm pots filed with soilless potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: fifteen pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales
Indicate the prior overseas applications with Country, Year of lodgement, Current status and Name applied in the following format.

Example 8

Country	Year	Current Status	Name Applied
Germany	1994	Granted	'Variety'
Denmark	1994	Granted	'Variety'

Also indicate date and country of first sale and date of first sale in Australia.

Example 9

First sold in Germany in 1994. First Australian sale nil.

Name of the person who prepared the description
Name and address of the person who prepared the description. It is preferable that the description be prepared by the Qualified Person or at the very least the draft has been seen and approved by the QP before final submission. Please note that it is a responsibility of the QP under the PBR Act to verify the particulars of the detailed description are accurate.

Example 10

Description: **Name**, Company (optional), Town/suburb, State (abbreviated)

Comparative Table
While preparing the table **NEVER** use the "table creating features" of word processing packages as they insert hidden formatting blocks that are difficult to remove before publication. Instead, use a single tab mark to align columns. NEVER use drawing objects to create lines, boxes or shading. Instead use the underscore character (_) to create lines for tables. Tables should normally be either 8.5cm wide (half page) or 17.5cm wide (full page). If necessary a very wide table can be presented in landscape orientation.

Please note the following points when preparing the comparative table:

- The candidate variety is always on the left of the table. If the same table is used for two or more candidate varieties, the candidate varieties are arranged in order of application numbers, higher application number to the left of the table. Comparators are always to the right of the candidate(s).
- Arrange the characteristics in order – this should be the same as the order in the UPOV technical guidelines for the species. Please ensure that each characteristics marked with an asterisk is included.
- If a UPOV technical guideline is not available use the order same as in the text part: Plant, Stem, Leaf, Inflorescence, Flower, Flower parts, Fruit, Fruit parts, Seed, special characters etc.
- For measured characteristics Mean, Standard Deviation, Least Significant Difference (LSD)*at P≤ 0.01 is mandatory.
- When quoting significant differences please give the level of probability in the following format: P≤0.001, P≤0.01, or ns.
- For discrete characters do not use scores. Please give a word description. eg. round, medium, tall etc.
- For ranked characteristics just give the numbers, do not use 'normal' statistical analysis. Non-parametric statistical procedures may be used in such cases.
- Use only the number of significant decimal places appropriate to the level of accuracy of the observations.
- If there are two or more candidate varieties, use range tests rather than an LSD, such as Duncan's Multiple Range Test or any other appropriate multiple range test. Enter the grouping characters as alphabet superscripts.

Completed Part 2 Applications should be sent to:

Plant Breeders Rights Australia
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858 CANBERRA ACT 2601

To facilitate editing, descriptions may also be sent via e-mail to: Tanvir.Hossain@affa.gov.au or PBR@affa.gov.au

Note: a signed copy of the Part 2 application along with the examination fee, one slide or photograph must also be sent by post.

Important Changes

WEBSITE ADDRESS
The new website address for Australian PBR office is http://www.affa.gov.au/pbr

HERBARIUM SPECIMENS
It is a requirement of the PBR Act that, for all native species, a suitable specimen be sent to the Australian Cultivar Registration Authority (ACRA). The processing of these specimens attracts a fee from the ACRA (currently $50). Payment of the fee should be sent directly to the ACRA along with the specimen and a completed Herb1 form. This form has recently been updated. The current form Herb 1(03/00) has three components: SUBMISSION OF SPECIMEN OF AUSTRALIAN NATIVE VARIETY TO THE ACRA, ACRA HERBARIUM SPECIMEN and CONFIRMATION OF SUBMISSION OF SPECIMEN TO THE ACRA. Please use the current version of the Herb 1 form for any future submission to the ACRA.

CURRENT PBR FORMS
The official forms for PBR purposes are periodically updated. A list of current PBR forms with their numbers and date of last update is given below. When a form is updated, the month and the year of the last update follow the form number within parentheses. For example, Form P1 was last updated in September 1998 and therefore this form gets a designation of Form P1 (9/98). We also encourage you to consult the 'Guidelines for Completing Part 1 Application Form' before filing in the Part 1 Application. To avoid delays we suggest that you use the latest version of the forms.

The Part 2 form has been updated in May 1999 to include the information on the "Confirmation of Submission of Propagating Material to a Genetic Resource Centre". Previously this was a separate form to be filled in at the time of final granting of PBR. We now encourage that the information on Genetic Resource Centre is given at the time of the Part 2 submission to avoid any delay to process the application at the final granting stage.

If you do not have the latest version of the form(s), please contact the PBR office. Alternatively, forms can be downloaded from the PBR web site at http://www.affa.gov.au/pbr

Name of Form	Form Number	Last Updated
Application for Plant Breeders Rights Part 1 – General Information	Form P1	September 1998
Guidelines for Completing Part1 Application Form	Part1ins	September 1998
Application for Plant Breeders Rights Part 2 – Description of New Variety	Form P2	May 1999
Nomination of a Qualified Person	Form QP 1	April 1999
Certification by a Qualified Person	Form QP 2	April 1999
Proposed Variety Names	Form DEN1	December 1995
Extension of Provisional Protection	Form EXT2	December 1999
Exemption of a Taxon from Farm Saved Seed	Form ET1	September 1998
Status of Application	Form STAT 1	November 1995
ACRA Herbarium Specimen	Form Herb 1	March 2000

Overseas Testing/Data

The PBR Act allows DUS data produced in other countries (overseas data) be used in lieu of conducting a comparative trial in Australia provided certain conditions relating to the filing of applications, sufficiency of the data and the likelihood that the candidate variety will express the distinctive characteristic(s) in the same way when grown locally. Briefly the overseas data could be considered where:

- The first PBR application relating to the candidate variety has been lodged overseas, and
- the variety has previously been test grown in a UPOV member country using official UPOV test guidelines and test procedures, (ie. equivalent to a comparative trial in Australia) and
- either, all the most similar varieties of common knowledge (including those in Australia) have been included in the overseas DUS trial, or
- the new overseas variety is so clearly distinct from all the Australian varieties of common knowledge that further DUS test growing is not warranted, and
- sufficient data and descriptive information is available to publish a description of the variety in an accepted format in Plant Varieties Journal; and to satisfy the requirements of the PBR Act.

The Qualified Person, in consultation with the agent/applicant, and perhaps other specialists and taxonomists, will need to evaluate the overseas data, test report and photographs to see if the application does fulfil all PBR Office requirements, and then advise the agent/applicant:

- either, to submit Part 2 incorporating a description for publication, any additional data and photographs and to pay the examination fee;
- or, to conduct a DUS trial in Australia, recommending to the applicant/agent which additional varieties of common knowledge to include;
- or, submit Part 2 including additional data (information about similar varieties in Australia to show that they are clearly distinct from the candidate variety that a further DUS test growing including the similar varieties is not warranted and that the variety displays the distinctive characteristics when grown in Australia)

Please note that the PBR office does not obtain overseas DUS test reports on behalf of applicants. It is the sole responsibility of the applicants to obtain these reports directly from the relevant overseas testing authorities. Where applicants already have the report they are advised to submit a certified true copy of the report with the Part 1 application. Applicants, or those duly authorised, may certify the copy.

If you do not have the test report available at the time of Part-1 application then you are advised to submit the Part-1 application without the test report. However, you should make arrangements to procure the DUS test report directly from the relevant testing authority. When the report becomes available, a certified copy should be supplied to the QP and the PBR office.

When the trial is based on an UPOV technical guideline and test report in an official UPOV language (English, German or French), it can be lodged in support of the application. In other cases the test reports must be in English.

The applicant/agent and Qualified Person should use the overseas test report to complete Part 2 of the application, making a decision on how to proceed in view of the completeness of the information, the comparators (if any) used in the overseas DUS trial and their knowledge of similar Australian varieties that may not have been included in the overseas test report.

If a description is based on an overseas test report, Australian PBR will not be granted until after the decision to grant PBR in the country producing the DUS test is made. The final decision on the acceptability of overseas data rest with the PBR office.

Descriptions from the Voluntary Cereal Registration Scheme

The *Plant Varieties Journal* now includes descriptions of cultivars registered under the Voluntary Cereal Registration Scheme. Please note that the publication of these descriptions in the *Plant Varieties Journal* does not qualify the cultivars to be protected under Plant Breeder's Rights (PBR). PBR is an entirely different scheme and there are certain requirements under the *Plant Breeder's Rights Act 1994*, which must be satisfied to be eligible for registration under PBR. However, it is possible that some cultivars published under the voluntary scheme are also registered under PBR. When a cultivar is registered under both schemes, the current PBR status of the cultivar is indicated in the descriptions. For information on registering a new cereal cultivar under the voluntary scheme please refer to the 'Cereal Registration Scheme' section at the back of this issue. Please note there is no descriptions from the Voluntary Cereal Registration Scheme in this issue.

Urgent Change in US Plant Patent Practice

Australian plant breeders need to be aware of a very significant change in the practice of the US Patent Office in relation to plant patents.

Examiners are now taking the position that if a US plant patent application is filed after the **grant** of Australian Plant Breeder's Rights directed to the same plant variety, then there is absolute forfeiture of the rights to obtain a US plant patent. This change in practice reflects a stringent interpretation of US patent law under 35 U.S.C. 10(d), and 35 U.S.C. 102(d).

In the unlikely event that an Australian Plant Breeder's Rights applicant achieves grant of Plant Breeder's Rights within one year of filing of the Plant Breeder's Rights application, then it will be necessary under the new US Patent Office position to file a US plant patent application within one year from the initial Australian application.

Given the new practice of the US Patent Office in relation to plant patents, it is essential that Australian Plant Breeder's Rights applicants file US plant patents before grant of their Plant Breeder's Rights. Grant of Plant Breeder's Rights must be closely monitored.

The change in US Patent Office practice is likely to be disputed and in the next issue of this journal may include further comments.

If you have any queries regarding this please contact your patent attorney.

Part 2 – Public Notices

Varieties Included in this Issue

An index reference for common names with botanical names is published in Appendix 9.

Acceptances

The following varieties are under provisional protection from the date of acceptance.

Antirrhinum hybrid
Snapdragon

'Yaprim' syn **Primrose Vein**
Application No: 1999/276 Accepted: 26 Jul 2000.
Applicant: **A T Yates & Son.**
Agent: **Plants Management Australia Pty Ltd,** Warragul, VIC.

'Yarob' syn **Rose Pink**
Application No: 1999/275 Accepted: 26 Jul 2000.
Applicant: **A T Yates & Son.**
Agent: **Plants Management Australia Pty Ltd,** Warragul, VIC.

Bracteantha bracteata
Everlasting Daisy

'Fire Ball'
Application No: 2000/254 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Golden Wish'
Application No: 2000/249 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Lemon Mist'
Application No: 2000/255 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'NN-9812AA'
Application No: 2000/236 Accepted: 21Aug 2000.
Applicant: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'NN-99131A'
Application No: 2000/237 Accepted: 21 Aug 2000.
Applicant: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'Orange Flame'
Application No: 2000/256 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Pink Delight'
Application No: 2000/250 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Pink Star'
Application No: 2000/247 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Rising Sun'
Application No: 2000/252 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Sweet Sensation'
Application No: 2000/251 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'White Lace'
Application No: 2000/248 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

'Yellow Gem'
Application No: 2000/253 Accepted: 28 Aug 2000.
Applicant: **Luff Partnership,** Kulnura, NSW.

Brassica napus var *oleifera*
Canola

'46C03'
Application No: 2000/199 Accepted: 17 Jul 2000.
Applicant: **Pioneer Hi-Bred International Inc.**
Agent: **Pioneer Hi-Bred Australia Pty Ltd,** Toowoomba, QLD.

'AG Judge'
Application No: 2000/267 Accepted: 29 Aug 2000.
Applicant: **Ag-Seed Research Pty Ltd,** Horsham, VIC.

'AG Outback'
Application No: 2000/266 Accepted: 29 Aug 2000.
Applicant: **Ag-Seed Research Pty Ltd,** Horsham, VIC.

Ceratopetalum gummiferum
New South Wales Christmas Bush

'Promises'
Application No: 2000/265 Accepted: 11 Sep 2000.
Applicant: **Brian Daniel.**
Agent: **Pro Oz Plants,** Kenthurst, NSW.

Chamelaucium hybrid
Waxflower Hybrid

'Susie'
Application No: 2000/208 Accepted: 8 Aug 2000.
Applicant: **AM Sattler & Co,** Williams, WA.

Columnia hybrid
Columnia

'Aladdin's Treasure'
Application No: 2000/286 Accepted: 29 Sep 2000.
Applicant: **Scobles Nursery,** Heatherton, VIC.

Fragaria x*ananassa*
Strawberry

'Colima'
Application No: 2000/264 Accepted: 13 Sep 2000.
Applicant: **VPP Corporation**.
Agent: **Spruson & Ferguson,** Sydney, NSW.

'Whitney'
Application No: 2000/263 Accepted: 13 Sep 2000.
Applicant: **VPP Corporation**.
Agent: **Spruson & Ferguson,** Sydney, NSW.

'Endurance'
Application No: 2000/006 Accepted: 12 Sep 2000.
Applicant: **Plant Sciences Inc, Berry R & D Inc**.
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

Fragaria x *Potentilla* hybrid
Ornamental Strawberry

'Sweet Pink'
Application No: 2000/221 Accepted: 10 Sep 2000.
Applicant: **Robert Pearce,** Ballina via Lismore, NSW.

'Sweet Red'
Application No: 2000/220 Accepted: 20 Aug 2000.
Applicant: **Robert Pearce,** Ballina via Lismore, NSW.

Gossypium hirsutum
Cotton

'NuCOTN 38'
Application No: 2000/278 Accepted: 11 Sep 2000.
Applicant: **Deltapine Australia Pty Ltd,** Goondiwindi, QLD.

'NuOPAL'
Application No: 2000/279 Accepted: 11 Sep 2000.
Applicant: **Deltapine Australia Pty Ltd,** Goondiwindi, QLD.

'NuTOPAZ'
Application No: 2000/277 Accepted: 11 Sep 2000.
Applicant: **Deltapine Australia Pty Ltd,** Goondiwindi, QLD.

'Sicot 289i'
Application No: 2000/280 Accepted: 12 Sep 2000.
Applicant: **CSIRO Plant Industry,** Narrabri, NSW.

'Sicot 70'
Application No: 2000/282 Accepted: 12 Sep 2000.
Applicant: **CSIRO Plant Industry,** Narrabri, NSW.

'Sicot 72'
Application No: 2000/283 Accepted: 12 Sep 2000.
Applicant: **CSIRO Plant Industry,** Narrabri, NSW.

'Siokra S-102'
Application No: 2000/284 Accepted: 12 Sep 2000.
Applicant: **CSIRO Plant Industry,** Narrabri, NSW.

'Siokra V-16i'
Application No: 2000/281 Accepted: 12 Sep 2000.
Applicant: **CSIRO Plant Industry,** Narrabri, NSW.

Gypsophila paniculata
Baby's Breath

'Danfesroy'
Application No: 2000/234 Accepted: 22 Sep 2000.
Applicant: **Danziger – 'Dan' Flower Farm**.
Agent: **Lynch Flowers,** Glenorie, NSW.

'Dangypflash'
Application No: 2000/235 Accepted: 22 Sep 2000.
Applicant: **Danziger – 'Dan' Flower Farm**.
Agent: **Lynch Flowers,** Glenorie, NSW.

Hardenbergia violacea
False Sarsparilla

'H 2/206'
Application No: 2000/206 Accepted: 18 Sep 2000.
Applicant: **Rod Parsons,** Hoddles Creek, VIC.

Hibiscus syriacus
Hibiscus

'Notwoodone' syn **Lavender Chiffon**
Application No: 2000/216 Accepted: 10 Aug 2000.
Applicant: **Notcutts Ltd.**
Agent: **Fleming's Nurseries and Associates Pty Ltd,** Monbulk, VIC.

'Notwoodtwo' syn **White Chiffon**
Application No: 2000/217 Accepted: 10 Aug 2000.
Applicant: **Notcutts Ltd.**
Agent: **Fleming's Nurseries and Associates Pty Ltd,** Monbulk, VIC.

Impatiens hawkeri
Impatiens

'BFP-796' syn **Apricot Celebration**
Application No: 2000/274 Accepted: 31 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

Lilium hybrid
Lily

'Corso' syn **Vletcor**
Application No: 2000/001 Accepted: 17 Sep 2000.
Applicant: **Vletter & Den Haan Beheer B.V.**
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

'Genova' syn **Vletgen**
Application No: 2000/002 Accepted: 17 Sep 2000.
Applicant: **Vletter & Den Haan Beheer B.V.**
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

'Rousillon' syn **Vletrous**
Application No: 2000/005 Accepted: 17 Sep 2000.
Applicant: **Vletter & Den Haan Beheer B.V.**
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

'Soldera' syn **Vletsol**
Application No: 2000/003 Accepted: 17 Sep 2000.
Applicant: **Vletter & Den Haan Beheer B.V.**
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

'Spain' syn **Vletspa**
Application No: 2000/004 Accepted: 17 Sep 2000.
Applicant: **Vletter & Den Haan Beheer B.V.**
Agent: **Watermark – Patent & Trademark Attorneys,** Hawthorn, VIC.

Limonium hybrid
Limonium

'Supreme Blue'
Application No: 1999/308 Accepted: 27 Sep 2000.
Applicant: **New World Plants Inc.**
Agent: **Mr Angus Stewart,** Terrigal, NSW.

'Supreme White'
Application No: 1999/307 Accepted: 27 Sep 2000.
Applicant: **New World Plants Inc.**
Agent: **Mr Angus Stewart,** Terrigal, NSW.

Lolium multiflorum
Italian Ryegrass

'Crusader'
Application No: 1999/323 Accepted: 19 Jul 2000.
Applicant: **Pyne Gould Guinness,** East Doncaster, VIC.

Lolium perenne
Perennial Ryegrass

'Beacon'
Application No: 2000/194 Accepted: 11 Sep 2000.
Applicant: **Vicseeds Pty Ltd,** Geelong, VIC.

'Ceres Kingston'
Application No: 1999/322 Accepted: 21 Jul 2000.
Applicant: **Pyne Gould Guinness,** East Doncaster, VIC.

Malus domestica
Apple

'Fiero'
Application No: 2000/230 Accepted: 3 Aug 2000.
Applicant: **Snyder L.L.C.**
Agent: **Garry Langford,** Grove, TAS.

'Snyder'
Application No: 2000/231 Accepted: 3 Aug 2000.
Applicant: **Snyder L.L.C.**
Agent: **Garry Langford,** Grove, TAS.

Medicago sativa
Lucerne

'PGL 10'
Application No: 2000/273 Accepted: 31 Aug 2000.
Applicant: **Pasture Genetics Pty Ltd,** Wingfield, SA.

Mimusops elengi
Mimusops

'Street Elegance'
Application No: 2000/192 Accepted: 1 Sep 2000.
Applicant: **Darwin Plant Wholesalers,** Winnellie, NT.

Nemesia hybrid
Nemesia

'Honey Mist'
Application No: 2000/127 Accepted: 3 Aug 2000.
Applicant: **John Churchus,** Devon Meadows, VIC.

Neoregelia hybrid
Neoregelia

'Lila'
Application No: 2000/195 Accepted: 19 Jul 2000.
Applicant: **Grant D Groves.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Pelargonium x*hortorum*
Pelargonium

'BFP-1561' syn **Violet Rose Starburst**
Application No: 2000/276 Accepted: 31 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'BFP-1700' syn **Designer Whitefire**
Application No: 2000/275 Accepted: 31 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

Pelargonium peltatum
Ivy Pelargonium

'Kleblue' syn **Royal Blue**
Application No: 2000/133 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klegatta' syn **Regatta**
Application No: 2000/134 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klepacif' syn **Pacifique**
Application No: 2000/135 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

Pelargonium zonale
Zonal Pelargonium

'Klecona'
Application No: 2000/131 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klelad' syn **Lady**
Application No: 2000/128 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klelesmo' syn **Lesmona**
Application No: 2000/129 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klesail' syn **Sailing**
Application No: 2000/132 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

'Klesectra' syn **Ecco Extra**
Application No: 2000/130 Accepted: 9 Aug 2000.
Applicant: **Klemm + Sohn GmbH & Co. KG.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

Petunia hybrid
Petunia

'Balrufbrip'
Application No: 2000/288 Accepted: 27 Sep 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'Balrufflav'
Application No: 2000/289 Accepted: 27 Sep 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'Balrufpurp'
Application No: 2000/290 Accepted: 28 Sep 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'Balrufvein'
Application No: 2000/287 Accepted: 27 Sep 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

'Sunbelki'
Application No: 2000/258 Accepted: 21 Aug 2000.
Applicant: **Suntory Limited.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Prunus avium
Sweet Cherry

'PC 7144-6' syn **Tieton**
Application No: 2000/245 Accepted: 10 Aug 2000.
Applicant: **Washington State University Research Foundation.**
Agent: **Fleming's Nurseries and Associates Pty Ltd,** Monbulk, VIC.

'Rivedel'
Application No: 2000/040 Accepted: 18 Sep 2000.
Applicant: **Pepinieres et Roseraies Georges Delbard Societe Anonyme.**
Agent: **Australian Nurserymen's Fruit Improvement Co. Ltd (ANFIC),** Bathurst, NSW.

'Sweet Georgia'
Application No: 2000/213 Accepted: 10 Sep 2000.
Applicant: **Rob Kruimink.**
Agent: **Fleming's Nurseries and Associates Pty Ltd,** Monbulk, VIC.

Rhododendron simsii
Azalea

'Meggy'
Application No: 2000/171 Accepted: 19 Jul 2000.
Applicant: **Karl Glaser.**
Agent: **Rodger Max Davidson,** Galston, NSW.

Rhododendron vireya hybrid
Vireya Rhododendron

'Belinda Chang'
Application No: 2000/145 Accepted: 19 Jul 2000.
Applicant: **Sylvia Saperstein,** Mullumbimby, NSW.

'Lavender Cloud'
Application No: 2000/149 Accepted: 19 Jul 2000.
Applicant: **Sylvia Saperstein,** Mullumbimby, NSW.

'Palamino'
Application No: 2000/148 Accepted: 19 Jul 2000.
Applicant: **Sylvia Saperstein,** Mullumbimby, NSW.

'Wild Child'
Application No: 2000/146 Accepted: 19 Jul 2000.
Applicant: **Sylvia Saperstein,** Mullumbimby, NSW.

Rosa hybrid
Rose

'Fortian'
Application No: 2000/168 Accepted: 17 Jul 2000.
Applicant: **The Fortians Union Inc.**
Agent: **Greg Lowe,** Tumbi Umbi, NSW.

'Interictira'
Application No: 2000/259 Accepted: 21 Aug 2000.
Applicant: **Interplant B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Meibrenec'
Application No: 1998/236 Accepted: 27 Sep 2000.
Applicant: **Meilland International.**
Agent: **Kim Syrus,** Myponga, SA.

'Meicaflon'
Application No: 1998/235 Accepted: 27 Sep 2000.
Applicant: **Meilland International.**
Agent: **Kim Syrus,** Myponga, SA.

'Meidrepil'
Application No: 1998/237 Accepted: 27 Sep 2000.
Applicant: **Meilland International.**
Agent: **Kim Syrus,** Myponga, SA.

'Panroug' syn **Red Calypso**
Application No: 2000/205 Accepted: 10 Aug 2000.
Applicant: **Panorama Roses N.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Ruibrei'
Application No: 2000/209 Accepted: 19 Jul 2000.
Applicant: **De Ruiter's Nieuwe Rozen B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Ruiklij' syn **Pink Calypso**
Application No: 2000/203 Accepted: 19 Jul 2000.
Applicant: **De Ruiter's Nieuwe Rozen B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Ruipottwodr'
Application No: 2000/210 Accepted: 19 Jul 2000.
Applicant: **De Ruiter's Nieuwe Rozen B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Ruiroskee' syn Sweet Unique
Application No: 2000/204 Accepted: 19 Jul 2000.
Applicant: **De Ruiter's Nieuwe Rozen B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Ruizweef'
Application No: 2000/211 Accepted: 19 Jul 2000.
Applicant: **De Ruiter's Nieuwe Rozen B.V.**
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

'Welstein'
Application No: 1999/062 Accepted: 17 Jul 2000.
Applicant: **Eric Welsh Roses.**
Agent: **Greg Lowe,** Tumbi Umbi, NSW.

'Wildfire 2000'
Application No: 2000/191 Accepted: 26 Jul 2000.
Applicant: **George Thomson.**
Agent: **Ross Roses,** Willunga, SA.

Saccharum hybrid
Sugarcane

'90H1178'
Application No: 2000/181 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q183'
Application No: 2000/182 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q184'
Application No: 2000/183 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q186'
Application No: 2000/184 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q187'
Application No: 2000/185 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q188'
Application No: 2000/186 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q189'
Application No: 2000/187 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q190'
Application No: 2000/190 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q191'
Application No: 2000/189 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

'Q192'
Application No: 2000/188 Accepted: 19 Jul 2000.
Applicant: **Bureau of Sugar Experiment Stations,** Indooroopilly, QLD.

Solanum tuberosum
Potato

'Andover'
Application No: 2000/093 Accepted: 11 Jul 2000.
Applicant: **Cornell University.**
Agent: **Wrightson Research,** Ballarat, VIC.

'Discovery'
Application No: 2000/025 Accepted: 21 Jul 2000.
Applicant: **The Department of Agriculture and Rural Development for Northern Ireland.**
Agent: **Wrightson Research,** Ballarat, VIC.

'NorValley'
Application No: 2000/246 Accepted: 10 Aug 2000.
Applicant: **NDSU Research Foundation.**
Agent: **BGP International Pty Ltd,** Melbourne, VIC.

'Pomeroy'
Application No: 2000/026 Accepted: 21 Jul 2000.
Applicant: **The Department of Agriculture and Rural Development for Northern Ireland.**
Agent: **Wrightson Research,** Ballarat, VIC.

'Rioja'
Application No: 2000/009 Accepted: 31 Jul 2000.
Applicant: **Veszprem University.**
Agent: **Wrightson Research,** Ballarat, VIC.

'White Lady'
Application No: 2000/010 Accepted: 21 Jul 2000.
Applicant: **Veszprem University.**
Agent: **Wrightson Research,** Ballarat, VIC.

Solidago hybrid
Solidago

'Dansolgold'
Application No: 2000/012 Accepted: 22 Aug 2000.
Applicant: **Danziger – 'Dan' Flower Farm.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

'Dansolmonte'
Application No: 2000/014 Accepted: 22 Aug 2000.
Applicant: **Danziger – 'Dan' Flower Farm.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

'Dansosolo'
Application No: 2000/013 Accepted: 22 Aug 2000.
Applicant: **Danziger – 'Dan' Flower Farm.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Sutera cordata
Sutera

‘Novasnow’
Application No: 2000/207 Accepted: 18 Sep 2000.
Applicant: **RW Rother.**
Agent: **Tony Kebblewhite t/a Florabundance Wholesale Nursery,** Verrierdale, QLD.

Syngonium podophyllum
Syngonium

‘Glo-Go’
Application No: 2000/219 Accepted: 28 Sep 2000.
Applicant: **Oglesby Plants International Inc.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Syzygium australe
Lilly Pilly

‘Bronzed Aussie’
Application No: 2000/272 Accepted: 29 Aug 2000.
Applicant: **Peter Paynter,** Erina, NSW.

Torenia hybrid
Torenia

‘Sunrenilapiho’
Application No: 2000/257 Accepted: 21 Aug 2000.
Applicant: **Suntory Limited.**
Agent: **Yates Botanicals Pty Limited,** Somersby, NSW.

Triticum aestivum
Wheat

‘Clearfield WHT CSD’
Application No: 2000/229 Accepted: 3 Aug 2000.
Applicant: **The State of Western Australia through its department of agriculture called Agriculture Western Australia.** Bentley Delivery Centre, WA.

Verbena hybrid
Verbena

‘Balazdapu’
Application No: 2000/243 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balazdela’
Application No: 2000/242 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balazlav’
Application No: 2000/244 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balazpima’
Application No: 2000/241 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balazropi’
Application No: 2000/239 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balwilblu’
Application No: 2000/238 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Balwildaav’
Application No: 2000/240 Accepted: 29 Aug 2000.
Applicant: **Ball FloraPlant – A Division of Ball Horticultural Company.**
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

‘Charmena’
Application No: 2000/222 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

‘Florena’
Application No: 2000/223 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

‘Luxena’
Application No: 2000/224 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

‘Morena’
Application No: 2000/225 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

‘Mylena’
Application No: 2000/226 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

‘Scarlena’
Application No: 2000/227 Accepted: 21 Aug 2000.
Applicant: **Novartis Seeds B.V.**
Agent: **Ramm Pty Ltd,** Picton, NSW.

DESCRIPTIONS

Key to definitions/symbols/words used in the detailed descriptions

*	=	Variety used as comparator
Agent	=	Australian agent acting on behalf of an applicant (usually where application is from overseas).
ca.	=	about
DMRT	=	Duncan's Multiple Range Test
DUS	=	Distinctiveness, Uniformity and Stability
Hyphened colours	=	A hyphen (-) between two different colours (eg. greyed-green) designates an intermediate colour between those two colours, where possible the RHS colour chart reference is also given.
LSD	=	Least Significant Difference
LSD/sig	=	The numerical value for the LSD (at P≤0.01) is in the first column and the level of significance between the candidate and the relevant comparator in subsequent columns
PVJ	=	Plant Varieties Journal
n/a	=	Not available
ns	=	Not significant
RHS	=	Royal Horticultural Society Colour Chart (Chip Number). The year following RHS indicates the edition.
std deviation	=	Standard deviation of the sample
syn	=	synonym
UPOV	=	International Union for the Protection of New Plant Varieties
+	=	When used in conjunction with an RHS colour, '+' indicates a notional extension of a colour series when a precise match can not be made. It is most commonly used when the adjacent colour chip(s) are of a different sequence
#	=	Values followed by the same letter are not significantly different at P≤0.01
Origin	=	Unless otherwise stated the female parent of the cross precedes the male parent
S-N-K test	=	Student-Newman-Keuls test
⒫	=	Variety(s) for which PBR has been granted

Agapanthus praecox ssp *orientalis* Agapanthus

'Snowstorm'

Application No: 1989/012 Accepted: 14 Feb 1989.
Applicant: **Stephen Wilken,** Silvan, VIC.
Agent: **Anthony Tesselaar International,** Silvan, VIC.

Characteristics (Table 1, Figure 27). Plant: sparse, clumping perennial. Leaf: attitude horizontal, colour yellow-green, length short, width narrow. Pedicel: length medium. Inflorescence: number of florets per inflorescence many. Floret: length long, width broad, arrangement overlapping, perianth colour inner white (RHS 155A-B), outer white (RHS 155A-B). Flowering time medium. Length of flowering period medium.

Origin and Breeding Open pollination: *Agapanthus praecox* ssp *orientalis* 'Albus' in autumn 1982. The seed was collected and germinated following typical nursery conditions, and the individual plants planted into an assessment bed in the nursery in Emerald VIC. The plant was assessed in-ground until 1988, when it was divided for container growing trials and uniformity assessment. Selection criteria: uniform plant height, flower number, size of open flower head, flower colour and evergreen characteristics. Propagation: vegetatively through many generations. Breeder: RW Rother, Emerald, VIC.

Choice of Comparators 'Dwarf White', 'Snow Drops' and 'Snow Ball' were chosen because they are all varieties with similar characteristics. The original parent 'Albus' was excluded from the trial because of its much taller (up to 1.5m) plant height.

Comparative Trial Location: Silvan VIC. Conditions: trial conducted in open, plants propagated from vegetative propagation, rooted plants planted into 200mm pots filed with soil-less potting mix (pine bark base), nutrition maintained with slow release fertilisers, pest and disease treatments applied as required. Trial design: ten pots of each variety arranged in a completely randomised design. Measurements: from thirty plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
New Zealand	1995	Granted	'Snowstorm'

First sold in Australia in 1997.

Description**: Mark Lunghusen,** Croydon, VIC.

Table 1 *Agapanthus* varieties

	'Snowstorm'	*'Dwarf White'	*'Snow Drops'	*'Snow Ball'
PLANT DENSITY	sparse	dense	sparse	dense
LEAF ATTITUDE	horizontal	erect	erect	horizontal
LEAF COLOUR	yellow green	dark green	dark green	dark green
LEAF LENGTH (cm)				
mean	14.2	20.7	15.7	16.9
std deviation	1.93	1.77	2.47	1.52
LSD/sig	1.95	P≤0.01	ns	P≤0.01
LEAF WIDTH (mm)				
mean	9.02	14.85	9.99	12.98
std deviation	1.27	2.68	1.96	0.88
LSD/sig	2.05	P≤0.01	ns	P≤0.01
PEDICEL LENGTH (cm)				
mean	40.9	37.2	41.1	26.8
std deviation	4.18	3.49	5.69	3.71
LSD/sig	4.71	ns	ns	P≤0.01

Table 1 continued

NUMBER OF FLOWERS PER INFLORESCENCE				
mean	38.4	28.1	43.6	27.0
std deviation	7.07	8.31	16.17	6.09
LSD/sig	11.60	ns	ns	P≤0.01
FLORET LENGTH (mm)				
mean	36.14	29.11	31.98	n/a
std deviation	1.08	1.12	2.43	n/a
LSD/sig	1.83	P≤0.01	P≤0.01	n/a
PETAL ARRANGEMENT				
	overlapping	not touching	not touching	n/a
TIME OF FLOWERING				
	medium	early	medium	late
LENGTH OF FLOWERING PERIOD				
	medium	long	medium	medium

Note: This is an amended version of 'Snowstorm' description published in *PVJ* 11(1) 10.

Alstroemeria hybrid
Alstroemeria

'Jive'

Application No: 1999/294 Accepted: 3 Mar 2000.
Applicant: **Koninklijke Van Zanten B.V.,** Rijsenhout, The Netherlands.
Agent: **F & I Baguley Flower & Plant Growers,** Clayton South, VIC.

Characteristics (Table 2, Figure 1) Plant: stem length long, stem thickness medium, density of foliage medium. Leaf: shape narrow elliptic, longitudinal axis of blade recurved, length short, width narrow. Inflorescence: umbel branch number medium to many, length short to medium, pedicel length medium. Flower: colour yellow orange, medium, tepal spread narrow to medium; outer tepal, shape broad obovate, depth of emargination shallow, stripes present number very few, colour yellow orange RHS 17A at the centre and RHS 14B at apex, margins and base; inner lateral tepals, shape elliptic, colour yellow orange RHS 17B at apex and centre and margins. stripes medium; inner median tepal, yellow orange colour present, stripes present. Stamens: filament yellow, spots absent; anther colour orange yellow. Ovary: anthocyanin absent to very weak; style yellow, stigma yellow, spots absent. (Note: all RHS numbers referred to in local observation were based on the 1986 edition.)

Origin and Breeding Controlled pollination: hybridisation between two non-commercial proprietary breeding lines in a planned breeding program at the applicant's nursery at Hillegom, The Netherlands. From this cross 'Jive' was chosen on the basis of flower colour. Propagation: a number of mature stock plants were generated from the original seedling by tissue culture through 10 generations to confirm uniformity and stability. 'Jive' will be commercially propagated by tissue culture. Breeder: Koninklijke Van Zanten B.V. of Rijsenhout, The Netherlands.

Choice of Comparators 'Golden Delight' *PVJ* 7(2) and 'Soleil'(ф) *PVJ* 12(2) were considered as similar varieties of common knowledge based on previous descriptions.

Comparative Trial Comparisons of most of the characteristics are based on Dutch trials, which were assessed under conditions of controlled environment in glasshouses. Characteristics of the comparators are derived from previous descriptions in the *Plant Varieties Journal*. Detailed flower descriptions of the candidate variety are based on plants growing in soil in a multispan polyhouse in Bunyip, VIC. Flowers from these plants were cut in bud and transported to Devon Meadows, VIC, and placed in a solution of 5% sugar and 1 ml/litre chlorine bleach. The flowers were assessed four to five days later.

Prior Applications and Sales

Country	Year	Current status	Name Applied
The Netherlands	1998	Granted	'Jive'
Canada	1999	Applied	'Jive'
EU	1999	Granted	'Jive'
New Zealand	1999	Granted	'Jive'

First Sold in The Netherlands in 1998.

Description: **David Nichols,** Rye, VIC.

Table 2 *Alstroemeria* varieties

	'Jive'	*'Golden Delight'	*'Soleil'(ф)
STEM CHARACTERISTICS			
length	long	long	long
thickness	medium	thick	thick
density of foliage	medium	n/a	medium to thick
LEAF CHARACTERISTICS			
length	short	long	long
width	narrow	broad	broad
shape of blade	narrow elliptic	n/a	narrow elliptic
longitudinal axis of blade	recurved	n/a	recurved
INFLORESCENCE CHARACTERISTICS			
number of umbel branches	medium to many	medium	medium
length of umbels	short to medium	long	long
pedicel length	medium	medium to long	medium
FLOWER CHARACTERISTICS			
main colour	yellow orange	yellow	yellow orange
size	medium	medium to large	medium
spread of tepals	narrow to medium	medium	medium
OUTER TEPAL CHARACTERISTICS			
shape of blade	broad obovate	n/a	obovate
depth of emargination	shallow	n/a	shallow
main colour (RHS)	17A, 14B	14A-14B	14B
stripes	present	absent	present
number of stripes	very few	absent	very few

INNER LATERAL TEPAL CHARACTERISTICS			
shape of blade	elliptic	elliptic	elliptic
yellow colour (RHS)	17B, 14B	17A, 21A	12A
number of stripes	medium	medium	few to medium
stripe thickness	medium	medium to large	medium
INNER MEDIAN TEPAL CHARACTERISTICS			
yellow colour	present	present	present
stripes	present	n/a	present
OTHER FLOWER CHARACTERISTICS			
filament colour	yellow	pink	orange
filament spots	absent	n/a	absent
anther colour	orange yellow	yellow green	orange like
style colour	yellow	yellow	yellow green
stigma colour	yellow	yellow	pink
spots on stigma	absent	absent	absent
anthocyanin in ovary	absent to very weak	weak	very weak to weak

'Stabecor' syn **Sunny Rebecca**

Application No: 1999/207 Accepted: 29 Sep 1999.
Applicant: **Van Staaveren b.v.,** Aalsmeer, The Netherlands.
Agent: **F & I Baguley Flower & Plant Growers,** Clayton South, VIC.

Characteristics (Table 3, Figure 2) Plant: stem length medium, stem thickness medium, density of foliage dense. Leaf: shape narrow elliptic, longitudinal axis of blade recurved, length very long, width medium. Inflorescence: umbel branch number medium, length long, pedicel length medium. Flower: red and yellow, size large, tepal spread broad; outer tepal, shape broad obovate, depth of emargination very deep, stripes absent, colour yellow RHS 11B at the margins and red RHS 47A at the centre and pale red at the base, the tip of the apex is green; inner lateral tepals, shape ovate, colour yellow RHS 9A at the centre and margins and red RHS 47A at the apex and pale red at the base, stripes medium number, medium thickness; inner median tepal, yellow colour present, stripes present. Stamens: filament red, spots absent; anther colour greenish. Ovary: anthocyanin weak to very weak; style red, stigma red, spots absent. (Note: all RHS numbers referred to in local observation were based on the 1986 edition.)

Origin and Breeding Spontaneous mutation: from 'Stabec'(Φ. The parent is a proprietary variety developed by the applicant. Selection criteria: 'Stabecor' was selected on the basis of flower characteristics, stem characteristics and stem quality. Propagation: a number of mature stock plants were generated from the original mutant by tissue culture through 10 generations to confirm uniformity and stability. 'Stabecor' will be commercially propagated by tissue culture. Breeder: Van Staaveren BV, Aalsmeer, The Netherlands.

Choice of Comparators 'Stabec'(Φ *PVJ* (9)1 and 'Statiren'(Φ *PVJ* (9)3 were considered as similar varieties of common knowledge. based on previous descriptions. 'Stabec'(Φ was chosen because it is a parent and 'Statiren'(Φ was chosen because it is from the same breeding program and has a large distinct red area at the centre of the outer tepals.

Comparative Trial Comparisons of most of the characteristics are based on Dutch trials, which were assessed under conditions of controlled environment in glasshouses. Characteristics of the comparators are derived from previous descriptions in the *Plant Varieties Journal*. Detailed flower descriptions of the candidate variety are based on plants growing in soil in a multispan polyhouse in Bunyip, VIC. Flowers from these plants were cut in bud and transported to Devon Meadows, VIC, and placed in a solution of 5% sugar and 1 ml/litre chlorine bleach. The flowers were assessed four to five days later.

Prior Applications and Sales

Country	Year	Current status	Name Applied
The Netherlands	1996	Granted	'Stabecor'
EU	1999	Granted	'Stabecor'
New Zealand	1999	Granted	'Stabecor'

First sold in The Netherlands in Jul 1997.

Description: **David Nichols,** Rye, VIC.

Table 3 *Alstroemeria* varieties

	'Stabecor'	*'Stabec'(Φ	*'Statiren'(Φ
STEM CHARACTERISTICS			
length	medium	medium	medium
thickness	medium	medium to thick	medium to thick
density of foliage	dense	medium	dense
LEAF CHARACTERISTICS			
length	very long	medium	medium
width	medium	medium	broad
shape of blade	narrow elliptic	n/a	narrow ovate
longitudinal axis of blade	recurved	recurved	straight
INFLORESCENCE CHARACTERISTICS			
number of umbel branches	medium	medium	medium
length of umbels	long	medium	long
pedicel length	medium	long	medium
FLOWER CHARACTERISTICS			
main colour	yellow	pink and white	red to red purple
size	large	large	large
spread of tepals	broad	broad	broad
OUTER TEPAL CHARACTERISTICS			
shape of blade	broad obovate	broad obovate	broad obovate
depth of emargination	very deep	n/a	n/a
main colour (RHS)	11B, 47A	155D, 67A	48A
stripes	absent	absent	present
number of stripes	absent	absent	few

Table 3 continued

INNER LATERAL TEPAL CHARACTERISTICS			
shape of blade	obovate	elliptic	elliptic
yellow colour (RHS)	9A, 11B	5A	21A, 23A
number of stripes	medium	many	medium
stripe thickness	medium	medium	medium
INNER MEDIAN TEPAL CHARACTERISTICS			
yellow colour	present	absent	absent
stripes	present	present	absent
OTHER FLOWER CHARACTERISTICS			
filament colour	red	pink	pale pink
filament spots	absent	absent	absent
anther colour	greenish	yellow green	greenish
style colour	red	pink	pale pink
stigma colour	red	n/a	pale pink
spots on stigma	absent	absent	present
anthocyanin in ovary	weak to very weak	weak	absent

'Stalog' syn **Olga**

Application No: 1999/206 Accepted: 23 Sep 1999.
Applicant: **Van Staaveren b.v.,** Aalsmeer, The Netherlands.
Agent: **F & I Baguley Flower & Plant Growers,** Clayton South, VIC.

Characteristics (Table 4, Figure 3) Plant: stem length long to very long, stem thickness medium to thick, density of foliage medium. Leaf: shape narrow elliptic, longitudinal axis of blade straight, length short to medium, width medium to broad. Inflorescence: umbel branch number few to medium, length medium, pedicel length short. Flower: colour pale yellow, size medium to large, tepal spread medium; outer tepal, shape broad obovate, depth of emargination medium to deep, stripes absent, colour pale yellow RHS 11D with pale pink infusion; inner lateral tepals, shape elliptic, colour yellow RHS 7A at centres and pale yellow RHS 11D at apex base and margins, stripes medium to many; inner median tepal, yellow colour present, stripes present. Stamens: filament pale yellow, spots absent; anther colour brownish. Ovary: anthocyanin absent to very weak; style pale yellow, stigma pale yellow, spots present. (Note: all RHS numbers referred to in local observation were based on the 1986 edition.)

Origin and Breeding Controlled pollination: seed parent breeders reference 89W875-1 by pollen parent breeders reference 87G1069-2 in a planned breeding program at the applicant's nursery at Aalsmeer, The Netherlands. The parents are proprietary breeding lines developed by the applicant. Selection criteria: from this cross 'Stalog' was chosen on the basis of flower colour, stem production and stem quality. Propagation: a number of mature stock plants were generated from the original seedling by tissue culture through 10 generations to confirm uniformity and stability. 'Stalog' will be commercially propagated by tissue culture. Breeder: Van Staaveren BV, Aalsmeer, The Netherlands.

Choice of Comparators 'Stabelin'(Þ *PVJ* (12)1 and 'Nevada'(Þ *PVJ* (7)4 were considered as similar varieties of common knowledge based on previous descriptions. 'Stabelin'(Þ was chosen because it is from the same breeding program and have some pale yellow colouring. 'Nevada'(Þ was chosen because of similarities in flower colour.

Comparative Trial Comparisons of most of the characteristics are based on Dutch trials which were assessed under conditions of controlled environment in glasshouses. Characteristics of the comparators are derived from previous descriptions in the *Plant Varieties Journal*. Detailed flower descriptions of the candidate variety are based on plants growing in soil in a multispan polyhouse in Bunyip, VIC. Flowers from these plants were cut in bud and transported to Devon Meadows, VIC, and placed in a solution of 5% sugar and 1 ml/litre chlorine bleach. The flowers were assessed four to five days later.

Prior Applications and Sales

Country	Year	Current status	Name Applied
The Netherlands	1997	Granted	'Stalog'
Japan	1998	Applied	'Stalog'
Canada	1999	Applied	'Stalog'

First sold in The Netherlands in Sep 1998.

Description: **David Nichols,** Rye, VIC.

Table 4 *Alstroemeria* varieties

	'Stalog'	***'Stabelin'**(Þ	***'Nevada'**(Þ
STEM CHARACTERISTICS			
length	long to very long	very long	medium to long
thickness	medium to thick	thick	thick
density of foliage	medium	medium to dense	dense
LEAF CHARACTERISTICS			
length	short to medium	long	medium to long
width	medium to broad	medium	broad
shape of blade	narrow elliptic	narrow ovate	narrow elliptic
longitudinal axis of blade	straight	recurved	slightly recurved
INFLORESCENCE CHARACTERISTICS			
number of umbel branches	few to medium	medium	medium
length of umbels	medium	long	medium to long
pedicel length	short	medium	medium
FLOWER CHARACTERISTICS			
main colour	yellow	yellow	yellow and cream white
size	medium to large	large	medium to large
spread of tepals	medium	small to medium	large

OUTER TEPAL CHARACTERISTICS			
shape of blade	broad obovate	broad elliptic	broad elliptic
depth of emargination	medium to deep	medium	n/a
main colour (RHS)	11D	6D	4D, 3C-D
stripes	absent	present	absent
number of stripes	absent	very few	absent
INNER LATERAL TEPAL CHARACTERISTICS			
shape of blade	elliptic	elliptic	elliptic
yellow colour (RHS)	7A, 11D	6D	3B-C
number of stripes	medium to many	few to medium	medium
stripe thickness	medium to thick	small to medium	small to medium
INNER MEDIAN TEPAL CHARACTERISTICS			
yellow colour	present	present	present
stripes	present	present	present
OTHER FLOWER CHARACTERISTICS			
filament colour	pale yellow	cream	white
filament spots	absent	absent	n/a
anther colour	pale yellow	orange	light orange to yellow
style colour	pale yellow	cream	n/a
stigma colour	pale yellow	cream	n/a
spots on stigma	present	present	n/a
anthocyanin in ovary	absent to very weak	absent	n/a

'Staloren' syn **Lorena**

Application No: 1999/209 Accepted: 23 Sep 1999.
Applicant: **Van Staaveren b.v.,** Aalsmeer, The Netherlands.
Agent: **F & I Baguley Flower & Plant Growers,** Clayton South, VIC.

Characteristics (Table 5, Figure 4) Plant: stem length long to very long, stem thickness medium, density of foliage medium. Leaf: shape elliptic, longitudinal axis of blade straight, length medium, width narrow to medium. Inflorescence: umbel branch number many, length medium, pedicel length short to medium. Flower: colour pale red, size large, tepal spread medium; outer tepal, shape broad obovate, depth of emargination deep, stripes absent, colour red RHS 41D at the centre and RHS 46D at the apex and yellow RHS 13D at margins and base; inner lateral tepals, shape obovate, colour yellow RHS 12A (14A) at centre and margins and red RHS 41D at the apex, stripes medium; inner median tepal, yellow colour present, stripes present. Stamens: filament pale orange red, spots absent; anther colour greenish. Ovary: anthocyanin medium (weak to medium); style pale orange red, stigma red, spots absent. (Note: data in parenthesis denotes Dutch observations, all RHS numbers referred to in local observation were based on the 1986 edition.)

Origin and Breeding Controlled pollination: seed parent breeders reference 89T935-1 by pollen parent breeders reference 87G1069-2 in a planned breeding program at the applicant's nursery at Aalsmeer, The Netherlands. The parents are proprietary breeding lines developed by the applicant. Selection criteria: from this cross 'Staloren' was chosen on the basis of flower colour, stem production and stem quality. Propagation: a number of mature stock plants were generated from the original seedling by tissue culture through 10 generations to confirm uniformity and stability. 'Staloren' will be commercially propagated by tissue culture. Breeder: Van Staavaren BV of Aalsmeer, The Netherlands.

Choice of Comparators 'Stalsam'(ϕ) *PVJ* (3)4 and 'Victoria'(ϕ) *PVJ* (7)4 were considered as similar varieties of common knowledge based on previous descriptions. 'Stalsam'(ϕ) was chosen because it is a variety from the same breeding program having similar red colouring. 'Victoria'(ϕ) was chosen because of similarities in flower colour.

Comparative Trial Comparisons of most of the characteristics are based on Dutch trials, which were assessed under conditions of controlled environment in glasshouses. Characteristics of the comparators are derived from previous descriptions in the *Plant Varieties Journal*. Detailed flower descriptions of the candidate variety are based on plants growing in soil in a multispan polyhouse in Bunyip, VIC. Flowers from these plants were cut in bud and transported to Devon Meadows, VIC, and placed in a solution of 5% sugar and 1 ml/litre chlorine bleach. The flowers were assessed four to five days later.

Prior Applications and Sales

Country	Year	Current status	Name Applied
The Netherlands	1998	Granted	'Staloren'
Europe	1998	Granted	'Staloren'
Japan	1998	Applied	'Staloren'
Kenya	1998	Applied	'Staloren'
USA	1999	Applied	'Staloren'

First sold in The Netherlands in Feb 1999.

Description: **David Nichols,** Rye, VIC.

Table 5 *Alstroemeria* varieties

	'Staloren'	*'Stalsam'(ϕ)	*'Victoria'(ϕ)
STEM CHARACTERISTICS			
length	long to very long	medium	long
thickness	medium	medium	thick
density of foliage	medium	n/a	medium
LEAF CHARACTERISTICS			
length	medium	long	long
width	narrow to medium	broad	broad
shape of blade	elliptic	n/a	narrow elliptic
longitudinal axis of blade	straight	n/a	straight
INFLORESCENCE CHARACTERISTICS			
number of umbel branches	many	medium	medium
length of umbels	medium	long	very long
pedicel length	short to medium	long	very long

Table 5 continued

FLOWER CHARACTERISTICS			
main colour	pale red	pink	orange red
size	large	medium	large
spread of tepals	medium	medium	medium
OUTER TEPAL CHARACTERISTICS			
shape of blade	broad obovate	obovate	broad elliptic
depth of emargination	deep	n/a	medium
main colour (RHS)	41D, 46D	38A, 39B	31B, 34BC
stripes	absent	absent	absent
number of stripes	absent	absent	absent
INNER LATERAL TEPAL CHARACTERISTICS			
shape of blade	obovate	narrow obovate	narrow obovate
yellow colour (RHS)	12A	n/a	12A
number of stripes	medium	medium	medium
stripe thickness	medium to thick	medium	small to medium
INNER MEDIAN TEPAL CHARACTERISTICS			
yellow colour	present	present	present
stripes	present	present	present
OTHER FLOWER CHARACTERISTICS			
filament colour	pale orange red	salmon pink	pale orange red
filament spots	absent	n/a	n/a
anther colour	greenish	green grey	brownish
style colour	pale orange red	purple pink	n/a
stigma colour	red	orange	n/a
spots on stigma	absent	present	n/a
anthocyanin in ovary	medium	strong	strong

'Stalra' syn **Tamara**

Application No: 1999/208 Accepted: 23 Sep 1999.
Applicant: **Van Staaveren b.v.,** Aalsmeer, The Netherlands.
Agent: **F & I Baguley Flower & Plant Growers,** Clayton South, VIC.

Characteristics (Table 6, Figure 5) Plant: stem length very long, stem thickness thick, density of foliage medium. Leaf: shape narrow elliptic, longitudinal axis of blade recurved, length medium, width narrow. Inflorescence: umbel branch number many to very many, length very long, pedicel length long. Flower: white, size large, tepal spread medium; outer tepal, shape broad obovate, depth of emargination deep, stripes absent, white RHS 155A with pale pink infusion in the centre, inner lateral tepals, shape elliptic, colour yellow RHS 3D at centre and white RHS 155A at margins base and apex, stripes medium to many; inner median tepal, yellow colour absent, stripes present. Stamens: filament pale yellow, spots absent; anther colour greenish. Ovary: anthocyanin medium to strong; style pale yellow, stigma pale yellow, spots present. (Note: all RHS numbers referred to in local observation were based on the 1986 edition.)

Origin and Breeding Controlled pollination: seed parent breeders reference 86R29-1 by pollen parent breeders reference 89G1041-1 in a planned breeding program at the applicant's nursery at Aalsmeer, The Netherlands. The parents are proprietary breeding lines developed by the applicant. Selection criteria: from this cross 'Stalra' was chosen on the basis of flower colour, stem production and stem quality. Propagation: a number of mature stock plants were generated from the original seedling by tissue culture through 10 generations to confirm uniformity and stability. 'Stalra' will be commercially propagated by tissue culture. Breeder: Van Staaveren BV, Aalsmeer, The Netherlands.

Choice of Comparators There are a number of white varieties that could be considered as comparators, viz. 'Alaska' *PVJ* (7)4, 'Zelblanca' *PVJ* (3)4, 'Virginia'(ф) *PVJ* (11)2, '587B'(ф) and '583 JA(ф) *PVJ* (9)4, 'Paloma'(ф) *PVJ* (3)2, 'Vienna'(ф) *PVJ* (9)3, 'Cavalier' *PVJ* (7)2, 'Stamond'(ф) *PVJ* (9)3 and 'Stabuwit'(ф) *PVJ* (3)4. While all of these varieties can be demonstrated to be different from one another in a number of characters, 'Stamond'(ф) and 'Stabuwit'(ф), from the same breeding program were finally chosen as the closest varieties.

Comparative Trial Comparisons of most of the characteristics are based on Dutch trials, which were assessed under conditions of controlled environment in glasshouses. Characteristics of the comparators are derived from previous descriptions in the *Plant Varieties Journal*. Detailed flower descriptions of the candidate variety are based on plants growing in soil in a multispan polyhouse in Bunyip, VIC. Flowers from these plants were cut in bud and transported to Devon Meadows, VIC, and placed in a solution of 5% sugar and 1 ml/litre chlorine bleach. The flowers were assessed four to five days later.

Prior Applications and Sales

Country	Year	Current status	Name Applied
The Netherlands	1997	Granted	'Stalra'
Japan	1998	Applied	'Stalra'
EU	1999	Granted	'Stalra'

First sold in The Netherlands in May 1998.

Description: **David Nichols,** Rye, VIC.

Table 6 *Alstroemeria* varieties

	'Stalra'	***'Stamond'**(ф)	***'Stabuwit'**(ф)
STEM CHARACTERISTICS			
length	very long	tall	medium
thickness	thick	medium to thick	medium to thick
density of foliage	medium	dense	n/a
LEAF CHARACTERISTICS			
length	medium	long	long
width	narrow	broad	broad to very broad
shape of blade	narrow elliptic	narrow ovate	n/a
longitudinal axis of blade	recurved	straight	n/a

INFLORESCENCE CHARACTERISTICS			
number of umbel branches	many to very many	medium to many	medium
length of umbels	very long	long	long
pedicel length	long	medium	long
FLOWER CHARACTERISTICS			
main colour	white	white	white
size	large	large	medium
spread of tepals	medium	broad	medium
OUTER TEPAL CHARACTERISTICS			
shape of blade	broad obovate	broad obovate	broad obovate
depth of emargination	deep	n/a	n/a
main colour (RHS)	155A	155D, 5C	155D
stripes	absent	present	absent
number of stripes	absent	few	absent
INNER LATERAL TEPAL CHARACTERISTICS			
shape of blade	elliptic	elliptic	obovate
yellow colour (RHS)	3D	4C	absent
number of stripes	medium to many	medium	many
stripe thickness	medium	medium	small
INNER MEDIAN TEPAL CHARACTERISTICS			
yellow colour	absent	absent	absent
stripes	present	present	absent
OTHER FLOWER CHARACTERISTICS			
filament colour	pale yellow	white	pink
filament spots	absent	absent	n/a
anther colour	greenish	greenish	grey
style colour	pale yellow	white	pink
stigma colour	pale yellow	white	pink
spots on stigma	present	absent	absent
anthocyanin in ovary	medium to strong	absent	strong

Brassica napus var *oleifera*
Canola

'AG Emblem'

Application No: 1999/171 Accepted: 25 Jun 1999.
Applicant: **Ag-Seed Research Pty Ltd,** Horsham, VIC.

Characteristics (Table 7, Figure 30) Plant: habit erect, height medium (80.9cm), early to medium early maturing. Seedling: cotyledon relatively wide (width/length ratio 1.99), first true leaf few hairs, 5th leaf lobed (2.9 lobes), colour green (RHS 137C, 1986). Flower: relatively narrow petals (length/width ratio 2.01), anther dotting absent. Pods: medium long (56.6mm), beak medium (9.7mm), pedicel medium long (19.4mm). Seed: black, canola quality.

Origin and Breeding Controlled pollination: seed parent breeding line 82-105N9*95-4 x pollen parent Westar*22 made in 1991. The seed parent is an inbred line characterised by early maturity, good blackleg resistance and lower oil content. The pollen parent is an inbred line characterised by higher oil content, later maturity and poor blackleg resistance. Between 1992 and 1996 the segregating material was selected, using a modified pedigree method, for yield, blackleg resistance, seed oil and protein content and canola quality in nurseries at Lake Bolac and Horsham. In 1998 the variety was entered into the Interstate Stage 2 Canola Trials and then to Stage 4 trials in 1999, as AGA98-7, and was trialled in several locations covering all canola-growing regions of Australia for two years. Certified seed production occurred in 1999 and the variety was commercialised in 2000. Selection criteria: early maturity, higher oil content, yield and blackleg resistance. Propagation: open pollinated seed. Breeder: Dr. Gururaj Kadkol, Ag-Seed Research Pty Ltd, Horsham, VIC.

Choice of Comparators 'Mystic'(ϕ) and 'Monty'(ϕ) were used as comparators. 'Monty'(ϕ) has been a major early maturing canola variety in Australia since 1997. 'Mystic'(ϕ) was included as a recently released early variety. The parents are excluded for reasons stated above.

Comparative Trial Location: Comparative trials were conducted at Ag-Seed Research trial site at Horsham, VIC. Conditions: field trials were conducted during 1999 season. Glasshouse trials were carried out in 1999 and 2000. Drought conditions were experienced during the season and this resulted in poor and variable plant growth in the field trial. Trial design: data on mature plant characters were collected in replicated field trials consisting six row, 10m plots laid out as randomised blocks. Seedling character data were collected in glasshouse trials designed as completely randomised trials. Measurement: data were recorded on 20 random plants from each of the three replicates giving a total of 60 observations per variety.

Prior Applications and Sales

No prior applications. First sold in Australia in 2000.

Description: **Dr. Gururaj Kadkol,** Ag-Seed Research Pty Ltd, Horsham, VIC.

'Georgie'

Application No: 1999/217 Accepted: 23 Sep 1999.
Applicant: **Department of Agriculture for and on behalf of the State of New South Wales,** Orange, NSW and **Grains Research and Development Corporation,** Barton, ACT.
Agent: **Ag-Seed Research Pty Ltd,** Horsham, VIC.

Characteristics (Table 7, Figure 30) Plant: habit erect, height medium (71.7cm), early to medium early maturing. Seedling: cotyledon relatively wide (width/length ratio 1.70), first true leaf variable for hairs, 5th leaf mostly lobed (2.0 lobes), colour green (RHS 137C, 1986). Flower: relatively narrow petals (length/width ratio 2.27), anther dotting variable. Pods: medium long (54.7mm), beak medium (9.0mm), pedicel medium long (20.7mm). Seed: black, Canola quality, high oil content.

Origin and Breeding Controlled pollination: seed parent breeding line BLN 938 x pollen parent 'Scoop'(ϕ) made in 1993. The seed parent is a proprietary breeding line

characterised by early maturity and good blackleg resistance. The pollen parent is characterised by higher oil content, medium maturity and good blackleg resistance. Between 1994 and 1996 the segregating material was selected, using a modified pedigree method, for yield, blackleg resistance, seed oil and protein content and canola quality in nurseries at Wagga Wagga. In 1996 the variety was entered into the Interstate Stage 2 Canola Trials and was trialled in several locations covering all canola-growing regions of Australia. In 1997 the variety was entered into S4 trials for two years. Selection criteria: higher blackleg resistance, oil content and yield. Propagation: by seed. Breeder: Mr. Neil Wratten, Agricultural Research Institute, NSW Agriculture, Wagga Wagga, NSW.

Choice of Comparators 'Mystic'(ф) and 'Monty'(ф) were used as comparators. 'Monty'(ф) has been a major early maturing canola variety in Australia since 1997. 'Mystic'(ф) was included as a recently released early variety. The parents are excluded for reasons stated above.

Comparative Trial Location: Comparative trials were conducted at Ag-Seed Research trial site at Horsham, VIC. Conditions: field trials were conducted during 1999 season. Glasshouse trials were carried out in 1999 and 2000. Drought conditions were experienced during the season and this resulted in poor and variable plant growth in the field trial. Trial design: data on mature plant characters were collected in replicated field trials consisting six row, 10m plots laid out as randomised blocks. Seedling character data were collected in glasshouse trials designed as completely randomised trials. Measurement: data were recorded on 20 random plants from each of the three replicates giving a total of 60 observations per variety.

Prior Applications and Sales Nil.

Description: **Dr. Gururaj Kadkol,** Ag-Seed Research Pty Ltd, Horsham, VIC.

Table 7 *Brassica* varieties

	'Georgie'	'AG Embelm'	*'Monty'(ф)	*'Mystic'(ф)
COTYLEDON WIDTH/LENGTH RATIO (LSD at P≤0.01 = 0.065)				
mean	1.703[a]	1.995[c]	1.651[a]	1.824[b]
std deviation	0.121	0.126	0.125	0.136
EXTENT OF HAIRS ON FIRST TRUE LEAF				
absent	33	3	23	40
few	16	55	34	20
numerous	11	2	3	0
PERCENTAGE OF LEAF LOBING				
present	66.0	100	3.3	63.0
NUMBER OF LEAF LOBES				
	2.0	2.87	0.1	1.5
DAYS TO 50% FLOWERING				
	80	79	78	79
PETAL LENGTH/WIDTH RATIO (LSD at P≤0.01 = 0.09)				
mean	2.27[b]	2.01[a]	2.05[a]	2.23[b]
std deviation	0.26	0.16	0.16	0.19
PERCENTAGE OF ANTHER DOTTING				
present	60.0	11.6	98.3	90.0
PLANT HEIGHT (cm) (LSD at P≤0.01 = 4.0)				
mean	71.7[a]	80.9[b]	70.1[a]	79.8[b]
std deviation	7.71	11.34	7.41	8.61
SILIQUA LENGTH (mm) (LSD at P≤0.01 = 2.9)				
mean	54.7[a]	56.6[a]	56.1[a]	63.3[b]
std deviation	6.43	7.89	5.32	7.00
PEDICEL LENGTH (mm) (LSD at P≤0.01 = 1.7)				
mean	20.7[b]	19.4[a]	19.0[a]	20.1[a]
std deviation	6.28	3.65	3.62	3.16
BEAK LENGTH (mm) (LSD at P≤0.01 = 0.9)				
mean	9.0[ab]	9.7[b]	8.8[a]	11.9[c]
std deviation	1.92	1.83	1.46	2.13

Note: mean values followed by the same letters are significantly different at P≤0.01.

'Bugle'

Application No: 1999/172 Accepted: 25 Jun 1999.
Applicant: **Ag-Seed Research Pty Ltd,** Horsham, VIC.

Characteristics (Table 8, Figure 31) Plant: habit erect, height medium (81.7cm), medium early maturing. Seedling: cotyledon relatively wide (width/length ratio 1.87), first true leaf few hairs, 5th leaf lobed (2.9 lobes), colour green (RHS 137C, 1986). Flower: relatively narrow petals (length/width ratio 2.08), anther dotting present. Pods: medium long (53.2mm), beak medium long (10.3mm), pedicel long (22.0mm). Seed: black, canola quality, high oil content.

Origin and Breeding Controlled pollination: seed parent 'Siren' x recurrent pollen parent 'Oscar'(ф) in a backcross (BC_1F_1) breeding program in 1994-95. The seed parent is characterised by triazine resistance, late maturity and poor blackleg resistance. The pollen parent is characterised by earlier maturity and good blackleg resistance. Between 1996 and 1998 the segregating material was selected, using a modified pedigree method, for yield, blackleg resistance, seed oil and protein content and canola quality in nurseries at Lake Bolac and Horsham. In 1999 the variety was entered into the Interstate Stage 4 Canola Trials as AGA99-22 and was trialled in several locations covering all canola-growing regions of Australia. Certified seed was produced in 1999 prior to commercialisation in 2000. Selection criteria: higher oil content, early maturity, yield and blackleg resistance. Propagation: open pollinated seed. Breeder: Dr. Gururaj Kadkol, Ag-Seed Research Pty. Ltd., Horsham, Victoria.

Choice of Comparators 'Drum'(ф) and 'Karoo'(ф) were used as comparators. 'Karoo'(ф) has been a major early maturing triazine resistant canola variety in Australia since 1997. 'Drum'(ф) was included as a triazine resistant variety of comparable maturity in cultivation. The parents are excluded for reasons stated above.

Comparative Trial Location: Comparative trials were conducted at Ag-Seed Research trial site at Horsham, VIC. Conditions: field trials were conducted during 1999 season. Glasshouse trials were carried out in 1999 and 2000. Drought conditions were experienced during the season and

this resulted in poor and variable plant growth in the field trial. Trial design: data on mature plant characters were collected in replicated field trials consisting six row, 10m plots laid out as randomised blocks. Seedling character data were collected in glasshouse trials designed as completely randomised trials. Measurement: data were recorded on 20 random plants from each of the three replicates giving a total of 60 observations per variety.

Prior Applications and Sales

No prior applications. First sold in Australia in 2000.

Description: **Dr. Gururaj Kadkol,** Ag-Seed Research Pty Ltd, Horsham, VIC

Table 8 *Brassica* varieties

	'Bugle'	*'Karoo'ф	*'Drum'ф
COTYLEDON WIDTH/LENGTH RATIO			
mean	1.868	2.068	1.867
std deviation	0.119	0.138	0.153
LSD/sig	0.062	P≤0.01	ns
EXTENT OF HAIRS ON FIRST TRUE LEAF			
absent	0	44	8
few	53	14	46
numerous	7	2	6
PERCENTAGE OF LEAF LOBING			
present	86.7	73.3	40.0
NUMBER OF LEAF LOBES			
	2.9	1.9	1.8
DAYS TO 50% FLOWERING			
	111	108	110
PETAL LENGTH/WIDTH			
mean	2.08	1.98	1.94
std deviation	0.149	0.195	0.148
LSD/sig	0.07	P≤0.01	P≤0.01
PERCENTAGE OF ANTHER DOTTING			
present	96.7	85.0	50.0
PLANT HEIGHT (cm)			
mean	81.7	73.6	78.2
std deviation	8.37	7.67	7.83
LSD/sig	3.4	P≤0.01	P≤0.01
PEDICEL LENGTH (mm)			
mean	22.04	17.8	19.2
std deviation	3.56	3.06	3.98
LSD/sig	2.0	P≤0.01	P≤0.01
BEAK LENGTH (mm)			
mean	10.3	9.1	6.6
std deviation	1.82	1.62	1.64
LSD/sig	0.83	P≤0.01	P≤0.01

Caustis blakei subsp *macrantha*
Koala Fern

'Forest Fantasy'

Application No: 1999/213 Accepted 30 Sep 1999.
Applicant: **The University of Queensland,** St Lucia, QLD and **McGeoch's Birkdale Nursery Pty Ltd,** Birkdale, QLD and **Rural Industries Research and Development Corporation,** Barton, ACT.
Agent: **Uniquest Pty Ltd,** St Lucia, QLD.

Characteristics (Table 9, Figure 28) Plant: habit erect sedge about 1m tall. Stem: rigid erect smooth green (RHS 137A) with straight, sparse and open ultimate branchlets, young flowering branches contracted and straight, branches and branchlets eventually expanding. Leaf: reduced to dark brown sheathing scales with pointed apices. Flower: insignificant brown spikelets 10-12mm, 1 to 1000 per inflorescence, anthers with appendage 5-6mm. Fruit: nut including beak 8-9mm long. Propagation: rapid multiplication of smaller plantlets *in vitro.* (Note: all RHS colour chart numbers refer to 1966 edition.)

Origin and Breeding *In vitro* selection: seed was collected from natural populations of *Caustis blakei* subsp *macrantha* and *C. blakei* subsp *blakei* occurring at 14 sites in QLD (Johnston *et al.* 1997). In most cases the parent material failed to develop and multiply *in vitro.* This species is known to be difficult to propagate. Extracted embryos were used as the explant source for callus cultures, which resulted in a diverse population of plantlets. *In vitro* selection program from 1330 genotypes of *C. blakei* commenced on 17 Aug 1995. Selections were subjected to a number of multiplication cycles and subcultured every 6 – 8 weeks. Selection criteria: multiplication rate, rooting percentage, and survival on transfer *ex vitro*. Selections were tested *ex vitro* for plant form and tolerance of yellowing. The selection 'Forest Fantasy' was identified on 15 Mar 1996 as a vigorous genotype. Propagation: it has been multiplied as an organised plantlet in tissue culture by subculturing every 6-8 weeks. A few off-types have been observed which die on transfer *ex vitro.* Breeder: Dr Margaret Johnston and Ms Julie Webber, The University of Queensland Gatton, Gatton, QLD.

Choice of Comparators *Caustis blakei* subsp *macrantha* (Comparator 1) and *C. blakei* subsp *blakei* (Comparator 2) were used as they represent the two natural forms of the species. Within the species there are no known varieties of common knowledge. 'Forest Fantasy' is morphologically similar to 'Comparator 1'.

Comparative Trial Location: The University of Queensland Gatton, Gatton, QLD. The trial using plantlets in tissue culture commenced on 26 Aug 1999. Conditions: plantlets were grown in the Tissue Culture Laboratory maintained at a temperature of 25±3ºC and light intensity of 80 – 85 µmol $m^{-2}s^{-1}$ supplied by GE Polylux 840 cool white fluorescent tubes, for 16 h per day. Jars of plantlets were rotated 3 times per week to minimise the influence of temperature and light variation within the room. Trial design: there were 40 individual plantlet replicates in jars. A completely randomised design was used. As a small number of plantlets died or became contaminated there were unequal replications. Measurements: number and size of all plantlets were recorded at the first subculture on 20 – 21 Oct 1999 and again at the second subculture on 9 – 10 Dec 1999.

Prior Applications and Sales Nil.

Description: **Margaret E. Johnston and Julie H. Webber,** The University of Queensland Gatton, QLD.

Table 9 *Caustis* varieties

	'Forest Fantasy'	*C. blakei subsp *macrantha*	*C. blakei subsp *blakei*
SUBCULTURE 1: NUMBER OF PLANTLETS			
mean	5.46	3.33	2.97
std deviation	1.30	1.75	1.27
LSD/sig	0.95	P≤0.01	P≤0.01
SUBCULTURE 1: PLANTLET LENGTH (mm)			
mean	38.79	48.68	49.11
std deviation	9.91	15.27	12.44
LSD/sig	8.26	P≤0.01	P≤0.01
SUBCULTURE 2: NUMBER OF PLANTLETS			
mean	14.08	5.69	5.33
std deviation	4.01	2.71	2.72
LSD/sig	2.08	P≤0.01	P≤0.01
SUBCULTURE 2: PLANTLET LENGTH (mm)			
mean	39.49	53.13	52.16
std deviation	5.38	10.87	13.70
LSD/sig	6.67	P≤0.01	P≤0.01

Reference: Johnston, M.E., Swarbrick, J.T., Wearing, A.H. and Webber, J.H. (1997). A new subspecies of *Caustis blakei* Kük. in Queensland. *Austrobaileya* 4(4):613-617.

Chrysanthemum x*multiflorum*
Chrysanthemum

'Samco'

Application No: 1995/056 Accepted: 6 Jun 1995
Applicant: **Dirk Pieters,** Oostnieuwrke, Belgium.
Agent: **Seaglades Nursery,** Mt Martha, VIC.

Characteristics (Figure 25) Plant: height very short to short. Stem: internode length very short to short, diameter thin, colour, yellow green (RHS 144C), anthocyanin colouration present, strength strong to very strong. Lateral shoot: attachment to stem medium, angle between lateral shoot and stem small. Peduncle: thickness thin, length of terminal flower head short. Stipule: size small. Leaf: length very short, width very narrow to narrow, length to width ratio medium, thickness medium, texture fleshy, serration fine to medium, colour upper side green (RHS 137A), length of lower lobe short, shape of base of sinus between lateral lobes round, claw in base of sinus between lateral lobes present, margins of sinus between lateral lobes converging, shape of base truncate, shape of apex mucronate. Inflorescence: form corymbiform, number of flower heads showing colour low. Flower head: diameter very small to small, height from involucral bracts to top of flower head low, type double, number of rows of involucral bracts 5 or less, involucral bracts among ray florets absent. Ray floret: longitudinal axis of majority of florets incurving, length of corolla tube short, cross section of ray concave, keel absent, length of outer florets short, width of outer florets medium, ratio length to width, medium, shape of tip dentate, colour of outer side of majority of ray florets at stage 8 white (RHS 155D) faintly tinged with yellow along the centre, texture textured. Disc: distribution of disc florets type 2. Disc floret: length very short, type tubular, colour yellow. Receptacle: diameter small, shape domed flat. Natural season of flowering medium.

Origin and Breeding Spontaneous mutation: from 'Veria Dark'. The parental variety is characterised by dark yellow coloured flower (RHS 6B). Selection criteria: white flower colour, growth habit, flower size and display. Propagation: cuttings through many generations. Breeder: Dirk Pieters, Oostnieuwrke, Belgium.

Choice of Comparators 'Nicole' is the most similar variety of common knowledge. However, 'Nicole' (US Plant Patent 7517) is characterised by its flat capitulum form; decorative capitulum type; white ray floret colour; medium flower head diameter (44-63mm) when fully open; short plant height with prolific branching pattern, which distinguishes 'Nicole' from the candidate variety.

Comparative Trial The description is based on overseas data sourced from the Plant Variety Rights Offices in Belgium and UK and verified in Australia. The comparative trial was conducted in Belgium in 20cm pots, outdoors from Jun to early Aug, then in glasshouse until late Sep, minimum temperature 15.5ºC.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Belgium	1991	Granted	'Samco'
France	1991	Surrendered	'Samco'
The Netherlands	1991	Terminated	'Samco'

First sold in Belgium in Mar 1991.

Description: **David Nichols,** Rye, VIC

Note: This is an amended version of 'Samco' description published in *PVJ* 9(3) 22.

'Tripoli'

Application No: 1995/059 Accepted: 6 Jun 1995
Applicant: **Dirk Pieters,** Oostnieuwrke, Belgium.
Agent: **Seaglades Nursery,** Mt Martha, VIC.

Characteristics (Figure 26) Plant: height very short. Stem: internode length very short, diameter thin, colour yellow green (RHS 146B), anthocyanin present, strength strong, brittleness absent. Lateral shoot: attachment to stem medium to strong, angle between lateral and stem medium. Peduncle: thickness thin, terminal flower head short. Stipule: size medium. Leaf: length very short, width very narrow to narrow, length to width ratio high, thickness thin, texture fleshy, serration fine to medium, colour green (RHS 137B), length of lower lobe medium, shape of base of sinus round, claw at base of sinus sometimes present, margin of sinus parallel, shape of base, asymmetric, shape of apex mucronate. Inflorescence: form corymbiform, number of flower heads medium to high. Flower head: diameter very small to small, height very low to low, type semi double, number of rows of ray florets low to medium, number of rows of involucral bracts five or less, involucral bracts among florets absent. Ray floret: longitudinal axis of majority straight, longitudinal axis of outer row straight, length of corolla tube very short to short, cross section of ray concave, keel present, keel number two, length of outer

florets short, width of outer florets narrow, ratio length to width medium to high, thickness thin, shape of tip dentate, colour of outer side of majority at stage 8 red purple (RHS 74D), colour of inner side of majority at stage 8 red purple (RHS 74A-74B), number medium, texture textured, disc diameter small, disc colour before anther dehiscence yellow, disc colour at anther dehiscence yellow. Disc: distribution of disc florets type 4. Disc floret: overall length very short to short, type tubular, colour yellow. Receptacle: diameter small, shape conical raised. Natural flowering season medium.

Origin and Breeding Controlled pollination: seed parent 'Prisma' x pollen parent 'Rozemarie' in a planned breeding program in Belgium. The new variety differs from the seed parent in plant size, inflorescence form and size. In similar comparison it also differs from the pollen parent in inflorescence form and plant size. Selection criteria: flower colour, growth habit, flower size and display. Propagation: cuttings through many generations. Breeder: Dirk Pieters, Oostnieuwrke, Belgium.

Choice of Comparators 'Alcala' is the most similar variety of common knowledge. However, it could be distinguished from 'Tripoli' by its darker red-purple ray floret colour (RHS 70A-B). There is another variety 'Stargazer', which is also considered as a similar variety in the USA. However, 'Stargazer' (US Plant Patent 5695) is characterised by more upright plant habit, taller plant height, less branching, longer leaves and longer peduncle, which distinguishes 'Stargazer' from the candidate variety.

Comparative Trial The description is based on overseas data sourced from the Plant Variety Rights Offices in Belgium and UK and verified in Australia. The comparative trial was conducted in Belgium in 20cm pots, outdoors from Jun to early Aug, then in glasshouse until late Sep, minimum temperature 15.5ºC.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Belgium	1991	Granted	'Tripoli'
The Netherlands	1991	Terminated	'Tripoli'
Germany	1991	Granted	'Tripoli'
France	1991	Granted	'Tripoli'
USA	1996	Granted	'Tripoli'

First sold in Belgium in Mar 1992.

Description: **David Nichols,** Rye, VIC.

Note: This is an amended version of 'Tripoli' description published in *PVJ* 9(3) 22.

Euphorbia pulcherrima
Poinsettia

'Pepride'

Application No: 1999/013 Accepted: 18 Nov 1999.
Applicant: **Paul Ecke Ranch Inc.,** Encinitas, California, USA.
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

Characteristics (Table 10, Figure 23) Plant: branching present, colour of stem reddish, intensity of colour medium. Leaf blade: length medium (120mm), width broad (103mm), shape broad elliptical, shape of base wedge, development of lobes strong, shape of sinus between lobes rounded , upper side colour green (ca RHS 147A), intensity strong, lower side colour green (ca RHS 137B), intensity medium, vein upperside colour reddish, vein lower side colour reddish. Petiole: length short (46mm), upperside colour reddish, intensity strong, lowerside colour reddish, intensity medium. Largest bract: length medium (179mm), width medium (134mm), distance between upper and lower bracts medium, upperside bract colour red (RHS 46A), lower bract colour red (RHS 53A), development of lobes strong, shape broad ovate, shape of base rounded, orientation upright, blistering present, intensity of blistering weak to medium. Cyme: width narrow to medium. Cyathium: size of glands medium, colour of glands yellow. (Note: all RHS colour chart numbers refer to 1986 edition)

Origin and Breeding Induced mutation: through irradiation of vegetative plants of '490 Red'Φ. The parental variety is characterised by spreading growth habit with medium plant height while the mutant characterisred by compact growth habit and a shorter plant height. Selection criteria: plant habit, height and unique bract shape. Propagation: vegetatively propagated by cutting over more than eight generations and is uniform and stable. Breeder: Peter Jacobsen, Skibby, Denmark.

Choice of Comparators 'V10 Red', 'Success', '490 Red'Φ, 'Duedeluxe'Φ syn Red Fox De LuxeΦ, 'Duemenorca' syn Red Fox Menorca Red, 'Duecabrired'Φ syn Red Fox Tabaluga RedΦ, 'Supjibi', 'Duespot'Φ syn Red Fox Spotlight Dark RedΦ, 'Duenidared'Φ syn Red Fox Victory RedΦ, 'Duemal'Φ syn Red Fox Malibu RedΦ, 'Duecap'Φ syn Red Fox Capri RedΦ, 'Dueimco'Φ syn Red Fox Coco 2000Φ, 'Fiscor'Φ syn Cortez RedΦ, 'Lilo', 'Diva' and 'Supjibi' were initially considered for the comparative trial because they all have red bract colour. 'Duedeluxe'Φ syn Red Fox De LuxeΦ, 'Duemenorca' syn Red Fox Menorca Red, 'Duecabrired'Φ syn Red Fox Tabaluga RedΦ, 'Duespot'Φ syn Red Fox Spotlight Dark, 'Duenidared'Φ syn Red Fox Victory RedΦ, 'Duemal'Φ syn Red Fox Malibu RedΦ, Duecap'Φ syn Red Fox Capri RedΦ, 'Dueimco'Φ syn Red Fox Coco 2000Φ, 'Fiscor'Φ syn Cortez RedΦ, 'Lilo', 'Diva' and 'Supjibi' were excluded from the trial as they had different RHS bract colours and different bract shapes. Finally, 'Success', '490 Red'Φ and 'V10 Red', were finally included in the trial as the most similar varieties.

Comparative Trial Location: Oasis Horticulture Pty Ltd, Winmalee, NSW, Aug 1999 – Feb 2000. Conditions: trials conducted in a polyhouse, rooted cuttings potted into 150mm pots in commercial potting mix and water, nutrients and plant protection as required, temperature maintained at ca. 25ºC day/ 18ºC night with nine and a half hour day length controlled with blackout curtains. Trial design: 15 plants per genotype arranged in a completely randomised design. Measurements: taken from all trial plants, one sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Denmark	1994	Surrendered	'Pepride'
France	1994	Surrendered	'Pepride'

Norway	1994	Granted	'Pepride'
Sweden	1994	Withdrawn	'Pepride'
Finland	1995	Applied	'Pepride'
Germany	1995	Surrendered	'Pepride'
Israel	1995	Granted	'Pepride'
The Netherlands	1995	Surrendered	'Pepride'
UK	1995	Surrendered	'Pepride'
Japan	1997	Applied	'Pepride'
EU	1996	Granted	'Pepride'
USA	1996	Granted	'Pepride'
New Zealand	1998	Granted	'Pepride'

First sold in USA in Apr 1997. First Australian sale in 1999.

Description: **Melissa Hunt,** Oasis Horticulture, Winmalee, NSW.

'Success'

Application No: 1999/016 Accepted: 18 Nov 1999.
Applicant: **Paul Ecke Ranch Inc.,** Encinitas, California, USA.
Agent: **Oasis Horticulture Pty Ltd,** Winmalee, NSW.

Characteristics (Table 10, Figure 24) Plant: branching present, colour of stem greenish red, intensity of colour medium. Leaf blade: length long (146mm), width medium (93mm), shape broad elliptical, shape of base straight to rounded, development of lobes medium, shape of sinus between lobes rounded, colour upper side green (ca RHS 147A), intensity strong, lower side colour green (RHS 147B), intensity of colour weak to medium, upper side vein colour reddish, lower side vein colour reddish. Petiole: length medium (53mm), colour of upper side reddish, intensity strong, colour of lower side reddish, intensity medium. Largest bract: length short (146mm) width narrow (53mm), distance between upper and lower bracts medium, colour upper side red (ca RHS 46A), colour lower side red (RHS 53B-C), development of lobes weak to medium, shape broad elliptical, shape of base rounded, orientation floppy, blistering present, intensity of blistering very weak. Cyme: width narrow. Cyathium: size of glands medium, colour of glands yellow. (Note: all RHS colour chart numbers refer to 1986 edition)

Origin and Breeding Induced mutation: of seedling desginated as H-18. This parental seeding is characterised by non- branching type while the mutant was characterised by self-branching type. Selection criteria: branching, bract colour, texture and size. Propagation: vegetatively propagated by cutting over more than eight generations and is uniform and stable. Breeder Franz Fruehwirth, Encinitas California USA.

Choice of Comparators 'V10 Red', 'Pepride', '490 Red'(Φ), 'Duedeluxe'(Φ) syn Red Fox De Luxe(Φ), 'Duemenorca' syn Red Fox Menorca Red, 'Duecabrired'(Φ) syn Red Fox Tabaluga Red(Φ), 'Supjibi', 'Duespot'(Φ) syn Red Fox Spotlight Dark Red(Φ), 'Duenidared'(Φ) syn Red Fox Victory Red(Φ), 'Duemal'(Φ) syn Red Fox Malibu Red(Φ), 'Duecap'(Φ) syn Red Fox Capri Red(Φ), 'Dueimco'(Φ) syn Red Fox Coco 2000(Φ), 'Fiscor'(Φ), 'Lilo', 'Diva' and 'Supjibi' were initially considered for the comparative trial because they all have red bract colour. 'Duedeluxe'(Φ) syn Red Fox De Luxe(Φ), 'Duemenorca' syn Red Fox Menorca Red, 'Duecabrired'(Φ) syn Red Fox Tabaluga Red(Φ), 'Duespot'(Φ) syn Red Fox Spotlight Dark, 'Duenidared'(Φ) syn Red Fox Victory Red(Φ), 'Duemal'(Φ) syn Red Fox Malibu Red(Φ), Duecap'(Φ) syn Red Fox Capri Red(Φ), 'Dueimco'(Φ) syn Red Fox Coco 2000(Φ), 'Fiscor'(Φ) syn Cortez Red(Φ), 'Lilo', 'Diva' and 'Supjibi' were excluded from the trial as they had different RHS bract colours and different bract shapes. Finally, 'Pepride', '490 Red'(Φ) and 'V10 Red', were finally included in the trial as the most similar varieties.

Comparative Trial Location: Oasis Horticulture Pty Ltd, Winmalee, NSW, Aug 1999 – Feb 2000. Conditions: trials conducted in a polyhouse, rooted cuttings potted into 150mm pots in commercial potting mix and water, nutrients and plant protection as required, temperature maintained at ca. 25º C day/ 18º C night with nine and a half hour day length controlled with blackout curtains. Trial design: 15 plants per genotype arranged in a completely randomised design. Measurements: taken from all trial plants, one sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Denmark	1993	Surrendered	'Success'
USA	1993	Granted	'559'
Finland	1995	Granted	'Success'
France	1995	Surrendered	'Success'
Germany	1995	Surrendered	'Success'
Israel	1995	Terminated	'Success'
Italy	1995	Applied	'Success'
Japan	1995	Applied	'Success'
Norway	1995	Granted	'Success'
Sweden	1995	Withdrawn	'Success'
UK	1995	Surrendered	'Success'
EU	1996	Granted	'Success'

First sold in Finland in Feb 1995. First Australian sale in 1999.

Description: **Melissa Hunt ,** Oasis Horticulture, Winmalee, NSW.

Table 10 *Euphorbia* varieties

	'Success'	'Pepride'	*'490 Red'(Φ)	*'V10 Red'
PLANT: BRANCHING				
	present	present	present	present
STEM: COLOUR				
	greenish red	reddish	reddish	greenish
STEM: INTENSITY OF COLOUR				
	medium	medium	medium	medium
LEAF BLADE: LENGTH (mm) LSD= 15				
mean	146^{a}	120^{c}	141^{ab}	130^{bc}
std deviation	19	12	18	9
LEAF BLADE: WIDTH (mm) LSD=13				
mean	93^{ab}	103^{a}	100^{ab}	90^{b}
std deviation	15	16	11	9
LEAF BLADE:				
shape	broad eliptical	broad eliptical	broad ovate	broad ovate
shape of base	straight to rounded	wedge	rounded	wedge

development of lobes				
	medium	strong	very weak	medium
shape of sinus between lobes				
	rounded	rounded	rounded	rounded
LEAF COLOUR				
upper side (RHS)				
	ca 147A	ca 147A	ca 147A	147A
intensity	strong	strong	strong	weak to medium
lower side (RHS)				
	147B	137B	137A	147C
intensity	weak to medium	medium	medium	weak to medium
VEIN COLOUR				
upper side	reddish	reddish	reddish	greenish
lower side	reddish	reddish	reddish	greenish
PETIOLE: LENGTH (mm) LSD= 9				
mean	53[b]	46[b]	64[a]	50[b]
std deviation	10	9	11	7
PETIOLE COLOUR				
upper side	reddish	reddish	reddish	reddish
intensity	strong	strong	strong	medium
lower side	reddish	reddish	reddish	greenish
intensity	medium	medium	strong	weak
LARGEST BRACT:LENGTH (mm) LSD=18				
mean	146[c]	179[b]	223[a]	192[b]
std deviation	19	15	15	24
LARGEST BRACT: WIDTH (mm) LSD=11				
mean	53[c]	134[a]	130[a]	105[b]
std deviation	10	11	10	13
BRACT				
distance between upper and lower bracts				
	medium	medium	medium	short
colour of upper side (RHS)				
	ca 46A	46A	46A-B	ca 46A
colour of lower side (RHS)				
	53B-C	53A	53C	53B
development of lobes				
	weak to medium	strong	weak to medium	very weak
shape	broad elliptical	broad ovate	broad elliptical to ovate	broad elliptical
shape of base	rounded	rounded	rounded	rounded
orientation	floppy	upright	floppy	horizontal
blistering	present	present	present	present
intensity of blistering				
	very weak	weak to medium	medium	medium
CYME				
width	narrow	narrow to medium	medium	broad
CYATHIUM				
size of glands				
	medium	medium	medium	medium
colour of glands				
	yellow	yellow	yellow	yellow

Note: mean values followed by the same letters are not significantly different at P≤0.01.

Festuca arundinacea
Turf Tall Fescue

'Creole'

Application No: 1998/212 Accepted: 9 Dec 1998.
Applicant: **Pasture Wise,** Kilmore, VIC.

Characteristics (Table 11, Figure 57) Ploidy: hexaploid. Plant: habit semi-upright, height of fertile tillers at maturity high (mean 88.48cm – pulled). Turf leaves: long, medium width, colour mid green. Flag leaf: length short (mean 247.67mm), width narrow (6.84mm). Inflorescence: spike length medium (304.94mm), heading medium (9th Nov). Prominent rhizomes develop in the second year.

Origin and Breeding Polycross: several lines of tall fescue were obtained from the USDA collection and two lines were selected for turf quallity at Cathkin, VIC. Selected plants from 'Bombina' and a Mediterranean turf type were placed in a polycross block at Kilmore, VIC. Ploycrossed seeds were collected from the Mediterranean turf type. Two further selections of progeny were made to obtain uniform plants with good colour. Selection criteria: turf quality. Propagation: by seed. Breeder: Ian Aberdeen, Kilmore, VIC.

Choice of Comparators Turf tall fescue varieties of common knowledge having similar leaf width and colour were selected as comparators: 'Mini Mustang', 'Tomahawk', 'Mustang II', 'Coronado'. Another new variety 'Currawong' was also included in the trial. The maternal parent was excluded because of its dwarf plant habit, which is clearly distinguishable from the candidate variety.

Comparative Trial Location: Whittlesea, VIC, spring-summer of 1999. Conditions: planted as spaced plants in open beds, managed for even and uniform growth. Trial design: 60 spaced plants of each variety arranged in randomised complete blocks with 6 replicates. Measurements: from all trial plants.

Prior Applications and Sales Nil.

Description: **Ian Aberdeen**, Aberdeen Consulting Pty Ltd., Kilmore, VIC.

'Currawong'

Application No: 1998/210 Accepted: 9 Dec 1998.
Applicant: **Pasture Wise,** Kilmore, VIC.

Characteristics (Table 11, Figure 57) Ploidy: tetraploid. Plant: habit upright, height of fertile tillers at maturity high (mean 97.77cm – pulled). Turf leaves: short, medium width, colour mid green. Flag leaf: length short (mean 148.48mm), width narrow (6.35mm). Inflorescence: spike length medium (251.2mm), heading medium (28th Oct.).

Origin and Breeding Recurrent Phenotypic Selection: selected from an open-pollinated population of turf tall fescue variety 'Falcon' which had been repeatedly selected for turf quality over 15 years. Selection criteria: fine leaf. Propagation: by seed. Breeder: Ian Aberdeen, Kilmore, VIC.

Choice of Comparators Turf tall fescue varieties of common knowledge having similar leaf width and colour

were selected as comparators: 'Mini Mustang', 'Tomahawk', 'Mustang II', 'Coronado'. Another new variety 'Creole' was also included in the trial. The parental variety 'Falcon' was excluded because it has wider leaves which is clearly distinguishable from the candidate variety.

Comparative Trial Location: Whittlesea, VIC, spring-summer of 1999. Conditions: planted as spaced plants in open beds, managed for even and uniform growth. Trial design: 60 spaced plants of each variety arranged in randomised complete blocks with 6 replicates. Measurements: from all trial plants.

Prior Applications and Sales Nil.

Description: **Ian Aberdeen**, Aberdeen Consulting Pty Ltd., Kilmore, VIC.

Table 11 *Festuca* varieties

	'Currawong'	'Creole'	*'Mini Mustang'	*'Tomahawk'	*'Mustang II'	*'Coronardo'
FLAG LEAF LENGTH (mm) LSD (P≤0.01) = 18.58						
mean	148.48^{ab}	247.67^{d}	172.02^{c}	160.32b^{c}	171.41^{c}	136.34^{a}
std deviation	37.89	55.46	38.66	36.13	47.07	27.80
FLAG LEAF WIDTH (mm) LSD (P≤0.01) = 0.96						
mean	6.35^{a}	6.84^{a}	7.34^{ab}	8.10^{bc}	8.80^{c}	6.94^{a}
std deviation	1.15	1.13	1.22	1.43	4.34	1.00
PULLED STEM LENGTH (cm) LSD (P≤0.01) = 6.58						
mean	97.77^{b}	88.48^{a}	96.49^{b}	99.91^{b}	100.47^{b}	89.52^{a}
std deviation	10.79	12.90	13.05	11.59	19.41	13.98
DAYS TO HEADING (from 30/09/99) LSD (P≤0.01) = 4.14						
mean	28.58^{a}	39.92^{c}	34.37^{b}	27.41^{a}	29.26^{a}	32.41^{ab}
std deviation	9.51	7.20	10.51	9.56	8.42	7.39
SPIKE LENGTH (mm) LSD (P≤0.01) = 23.12						
mean	251.19^{b}	304.94^{c}	318.92^{c}	256.41^{b}	265.40^{b}	223.20^{a}
std deviation	50.16	60.47	48.26	42.35	55.60	35.37

Note: mean values followed by the same letter are not significantly different at P≤0.01 according to DMRT.

Festuca arundinacea
Tall Fescue

'Encore'

Application No: 1998/209 Accepted: 9 Dec 1998.
Applicant: **Pasture Wise,** Kilmore, VIC.

Characteristics (Table 12, Figure 56) Ploidy: hexaploid. Plant: habit semi-upright, height of fertile tillers at maturity low (mean 93.33cm – pulled). Leaves: long, medium width, Flag leaf: length long (mean 284 mm), width medium (6.84mm). Inflorescence: spike length long (385 mm), heading late (6th Dec). Prominent rhizomes develop in the second year.

Origin and Breeding Polycross: pre-basic stand of 'Bombina'$^{(\phi)}$ was established at Cathkin, VIC in 1994. In 1997, fifty plants showing exceptional growth in winter were removed to and placed in polycross block at Kilmore, VIC. From F_2 generation, the polycross progeny showing best winter growth were further selected and polycrossed. The progeny from this polycross plants became 'Encore'. Selection criteria: winter growth. Propagation: by seed. Breeder: Ian Aberdeen, Kilmore, VIC.

Choice of Comparators Forage tall fescue varieties of common knowledge were selected as comparators: 'Dovey', 'Demeter', 'Cajun', 'Torpedo', 'Advance', 'Vulcan', 'Bombina'$^{(\phi)}$ and 'Triumph'. 'Bombina'$^{(\phi)}$ is also the original source material.

Comparative Trial Location: Whittlesea, VIC, spring-summer of 1999. Conditions: planted as spaced plants in open beds, managed for even and uniform growth. Trial design: 60 spaced plants of each variety arranged in randomised complete blocks with 6 replicates. Measurements: from all trial plants.

Prior Applications and Sales Nil.

Description: **Ian Aberdeen**, Aberdeen Consulting Pty Ltd., Kilmore, VIC.

Table 12 *Festuca* varieties

	'Encore'	*'Dovey'	*'Demeter'	*'Cajun'	*'Torpedo'	*'Advance'	*'Vulcan'	*'Bombina'(ф)	*'Triumph'
DAYS TO HEADING (from 31st August)									
mean	67.00	32.00	46.00	41.00	77.00	56.00	62.00	63.00	31.00
std deviation	12.18	8.21	9.56	7.63	10.30	13.86	10.43	18.70	8.21
LSD/sig	7.52	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	ns	ns	P≤0.01
FLAG LEAF LENGTH (mm)									
mean	284.0	179.9	233.5	227.0	248.7	229.7	227.9	228.4	191.9
std deviation	62.42	38.82	62.99	53.87	49.44	52.78	54.12	61.29	36.22
LSD/sig	35.93	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (cm)									
mean	93.33	111.77	112.35	110.05	83.93	107.00	121.71	76.27	106.03
std deviation	14.32	12.48	12.27	11.31	15.98	14.48	15.53	14.84	11.52
LSD/sig	9.12	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01

'Flecha' syn Grasslands Flecha

Application No: 1998/163 Accepted 30 Nov 1998.
Applicant: **New Zealand Pastoral Agriculture Research Institute Limited,** Palmerston North, New Zealand.
Agent: **AgResearch Grasslands,** Birrabee Park via Albury, NSW.

Characteristics (Table 13, Figure 55) Plant: habit intermediate, moderately tall (mean height at maturity 102cm) winter active tufted perennial. Stem: average 3.6 per plant at maturity, mean length (exc.panicle) 74cm, mean node number 2.13. Vegetative leaf: mean length 156.4cm, mean width 6.5mm. Flag leaf: mean length 17.7cm, mean width 6.7mm. Colour: medium green. Maturity: 54 days to mean heading from 1/9/99. Panicle: erect or drooping, moderate density, mean length 32cm. Spikelets: mean length 13.6mm. Glumes: mean length 5.7mm.

Origin and Breeding Phenotypic Selection: from 'Lironde', two replicates of $3m^2$ plots sown in 1989 at Pergamino in Argentina. Plots assessed for two years and 650 plants selected for winter activity and leaf size. Further selections made until 1993 when 212 plants were finally selected, their seed harvested and bulked. This seed was sown in 1994 to produce pre-basic seed. From 1994 to 1998 further increases were rogued to increase uniformity and produce final breeder seed. Propagation: seed. Breeder: Martin Arechavaleta, Buenos Aires, Argentina.

Choice of Comparators 'Bombina'(ф) and 'Midwin'(ф) were chosen as comparators as both are winter active varieties, and of Mediterranean origin. 'Demeter' is considered a standard control variety. 'Resolute' is claimed to be a winter active and summer dormant variety. 'Melik' was included because of it's Mediterranean origin. 'Grasslands Advance'(ф) was not included because it is winter dormant, summer active, and later heading. The parental variety 'Lironde' was not included as it differs from 'Flecha' in being more erect in growth habit, having shorter and narrower flag leaves and a weak propensity to produce inflorescences in the year of sowing.

Comparative Trial Location: Agriculture Victoria, Rutherglen, VIC. (Latitude 36ºS, longitude 146ºE) Aug 1999 – Feb 2000. Conditions: seed sown direct into 60mm tubes of 2 parts sand, 2 parts composted bark and 1 part peat moss on 1/5/99. Surface covered with perlite and tubes hand watered as required in a polyhouse. Fertiliser applied in the form of *Thrive* @ 0.89g/L on 1/6/99 and 18/6/99. Plants trimmed on 25/6/99 and 16/7/99 to 5cm. Seedlings planted in field on 6/8/99. Superphosphate applied at five grams per plant at planting time. Moluscicide and *Fastac* (50ml/ha) applied immediately after planting. *Dominex* (50ml/ha) sprayed on 14/10/99. Trial design: 100 plants of each variety in a 10 plant x 10 replicate randomised block with 65cm plant spacings. Measurements: recorded on all available plants.

Prior Applications and Sales

Country	Year	Current status	Name Applied
Argentina	1995	Granted	'Flecha'

First sold in Argentina in Jan 1998.

Description: **Jeff E. Miller,** Palmerston North, New Zealand

Table 13 *Festuca* varieties

	'Flecha'	'Bombina'(Ф)	'Demeter'	'Melik'	'Midwin'(Ф)	'Resolute'
LEAF COLOUR (1 = light green – 3 = dark green) 21/9/99						
mean	1.96	1.99	2.22	1.83	1.74	2.15
std deviation	0.28	0.34	0.54	0.37	0.46	0.48
LSD/sig	0.26	ns	P≤0.01	ns	ns	ns
WINTER GROWTH SCORE (1 = poor – 5 = vigorous) 7/7/99						
mean	2.05	2.45	2.79	2.53	2.53	3.00
std deviation	0.80	0.59	0.63	0.69	0.69	0.88
LSD/sig	0.31	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01
VEGETATIVE LEAF LENGTH (cm)						
mean	15.43	19.53	19.57	18.19	19.51	22.86
std deviation	3.62	4.24	3.88	3.67	4.64	5.00
LSD/sig	1.63	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01
VEGETATIVE LEAF WIDTH (mm)						
mean	6.50	8.22	9.15	7.23	7.29	8.62
std deviation	1.18	1.29	1.65	1.37	1.32	1.38
LSD/sig	0.43	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01
MEAN HEADING DATE (days from 1/9/99)						
mean	54	66	55	50	64	54
std deviation	6.76	7.50	6.94	6.57	6.67	9.06
LSD/sig	2.79	P≤0.01	ns	P≤0.01	P≤0.01	ns
PLANT GROWTH HABIT (1 = erect – 9 = prostrate)						
mean	5.53	3.47	6.47	5.47	3.89	6.44
std deviation	2.22	1.58	1.55	2.08	1.81	1.31
LSD/sig	1.03	P≤0.01	ns	ns	P≤0.01	ns
PLANT HEIGHT(cm) 25 days after mean heading						
mean	101.7	78.2	95.0	115.1	104.4	92.7
std deviation	18.03	12.06	12.80	14.46	13.01	17.58
LSD/sig	8.29	P≤0.01	ns	P≤0.01	ns	P≤0.01
FLAG LEAF LENGTH (cm)						
mean	17.69	19.20	18.50	18.11	18.02	14.83
std deviation	4.27	4.87	4.83	4.05	6.36	3.94
LSD/sig	2.48	ns	ns	ns	ns	P≤0.01
FLAG LEAF WIDTH (mm)						
mean	6.69	7.87	9.20	7.28	7.64	7.22
std deviation	1.20	1.41	2.02	1.37	1.28	1.78
LSD/sig	0.59	P≤0.01	P≤0.01	ns	P≤0.01	ns
STEM LENGTH(cm) including panicle						
mean	106.28	85.55	100.74	111.30	109.54	100.21
std deviation	16.16	14.75	10.91	16.27	13.22	14.22
LSD/sig	6.83	P≤0.01	ns	ns	ns	ns
NUMBER OF STEM NODES						
mean	2.13	2.56	2.61	2.49	2.80	2.70
std deviation	0.49	0.55	0.60	0.53	0.56	0.54
LSD/sig	0.24	P≤0.01	P≤0.01	P≤0.01	P≤0.01	P≤0.01
NUMBER OF PANICLE BRANCHES						
mean	12.4	9.5	12.4	12.0	12.0	11.7
std deviation	2.7	2.0	3.8	2.0	1.6	2.6
LSD/sig	1.8	P≤0.01	ns	ns	ns	ns
STEM NUMBER SCORE (0 = none, 1 = few, 9 = many)						
mean	3.7	3.9	4.1	3.7	3.5	2.5
std deviation	1.4	1.1	1.3	1.5	1.8	1.4
LSD/sig	0.6	ns	ns	ns	ns	P≤0.01
SPIKELET LENGTH (mm)						
mean	13.64	12.01	13.04	14.15	11.93	13.60
std deviation	1.81	2.04	1.63	1.81	1.62	1.77
LSD/sig	0.76	P≤0.01	ns	ns	P≤0.01	ns

Fig 1 ***Alstroemeria*** **– flowers of 'Jive'.**

Fig 2 ***Alstroemeria*** **– flowers of 'Stabecor' syn Sunny Rebecca.**

Fig 3 ***Alstroemeria*** **– flowers of 'Stalog' syn Olga.**

Fig 4 ***Alstroemeria*** **– flowers of 'Staloren' syn Lorena.**

Fig 5 *Alstroemeria* **– flowers of 'Stalra' syn Tamara.**

Fig 6 *Rosa* **– flowers and plant parts of 'Meideauri'.**

Fig 7 *Rosa* **– flowers and plant parts of 'Meiroupis'.**

Fig 8 Rosa – flowers and plant parts of 'Dictator'

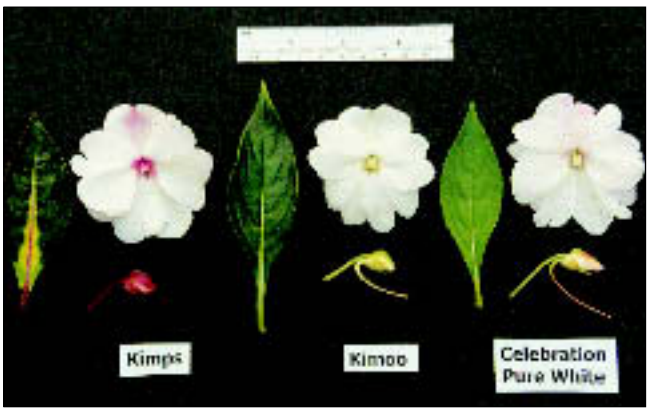


Fig 9 *Impatiens* **– leaves, flowers and buds of 'Kimps' (left) and 'Kimoo' (centre) with 'Celebration Pure White'ф (right).**

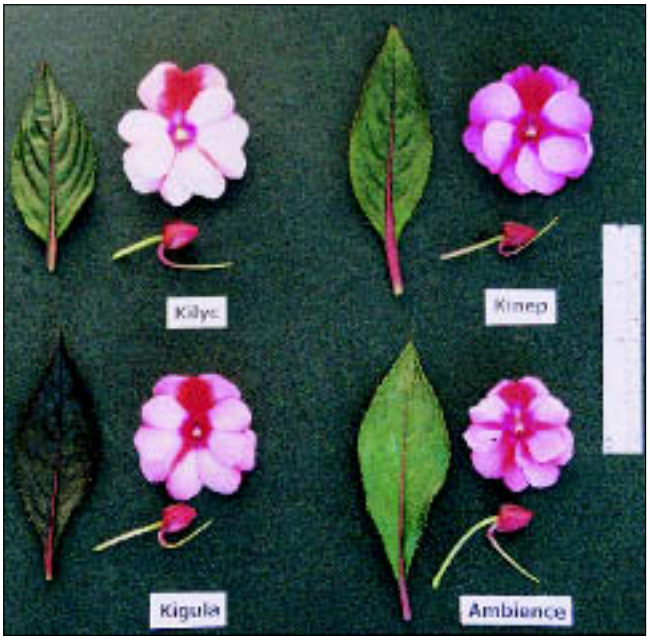


Fig 10 *Impatiens* **– leaves, flowers and buds of 'Kilyc' and 'Kinep' (top row from left) and with 'Kigula' and 'Ambience'ф (bottom row from left).**

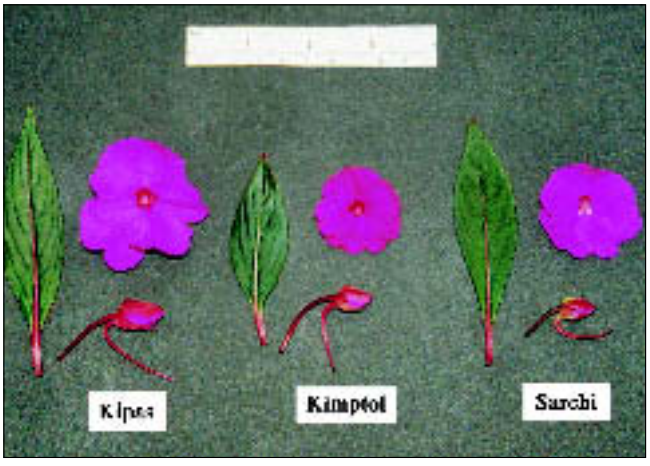


Fig 11 *Impatiens* **– leaves, flowers and buds of 'Kipas' (left) and 'Kimptol' (centre) with 'Sarchi' (right)**

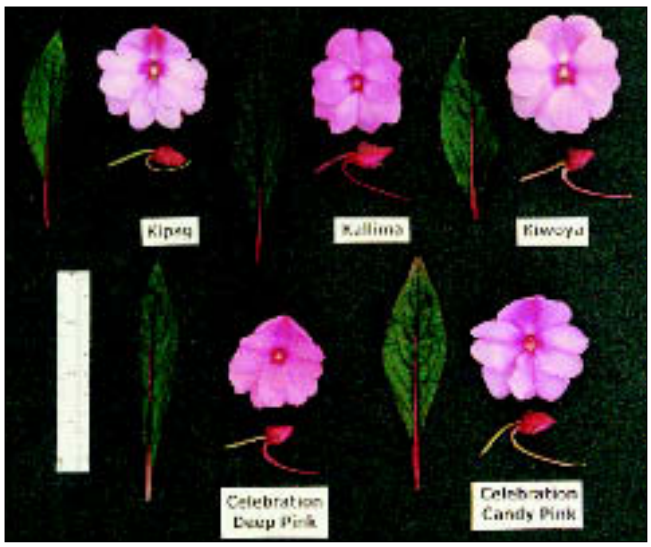


Fig 12 *Impatiens* **– leaves, flowers and buds of 'Kipag', 'Kallima' and 'Kiwoya' (top row from left) with 'Celebration Deep Pink' and 'Celebration Candy Pink' (bottom row from left).**

Fig 13 *Impatiens* **– leaves, flowers and buds of 'Kispix', 'Kitoga' and 'Kimpgua' (top row from left) with 'Shadow', 'Celebration Purple Star' and 'Celebration Candy Pink' (bottom row from left)**

Fig 14 *Impatiens* **– leaves, flowers and buds of 'Prep', 'Kiala' and 'Kirawa' (top row from left) with 'Kimpque' and 'Celebration Deep Red' (bottom row from left).**

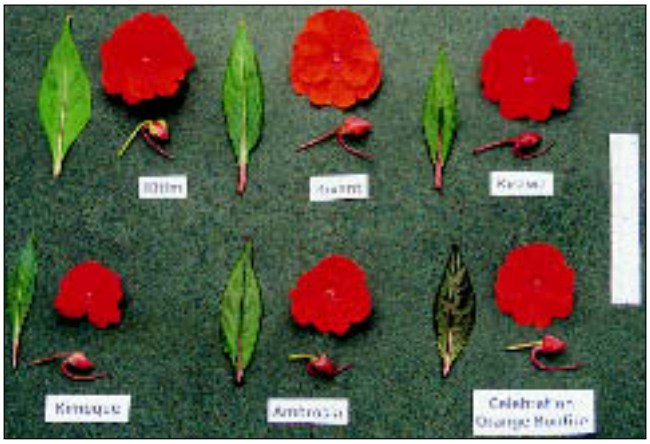


Fig 15 *Impatiens* **– leaves, flowers and buds of 'Kitim', 'Kixant' and 'Kirawa' (top row from left) with 'Kimpque' 'Ambrosia' and 'Celebration Orange Bonfire' (bottom row from left).**

Fig 16 *Impatiens* **– leaves, flowers and buds of 'Kibon', 'Kigre' and 'Kinoc' and 'Kilor' (top row from left) with 'Nicoya', 'Illusion' and 'Rose Celebration' (bottom row from left).**

Fig 17 *Rhododendron simsii* **– flowers and leaves of 'Bina'.**

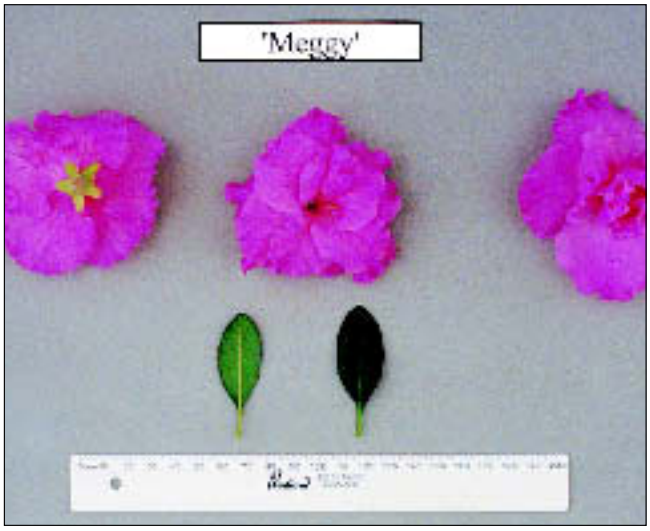


Fig 18 *Rhododendron simsii* **– flowers and leaves of 'Meggy'.**

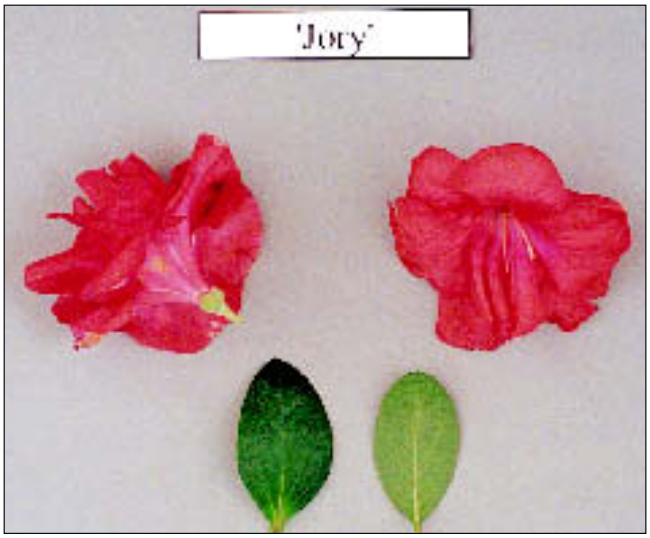


Fig 19 *Rhododendron simsii* **– flowers and leaves of 'Jory'.**

Fig 20 *Pelargonium tricolor* **– 'PEL001' with comparator 'Splendide' showing differences in leaves.**

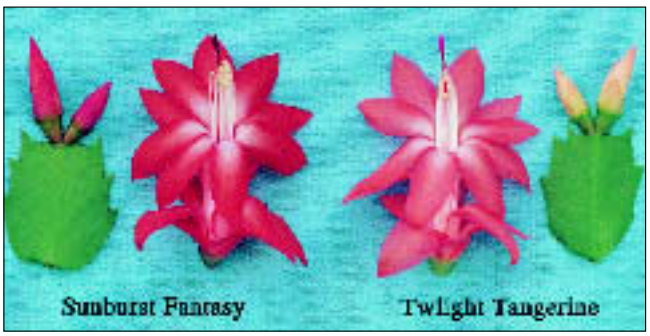


Fig 21 *Schlumbergera truncata* **– 'Sunburst Fantasy' (left) with comparator 'Twilight Tangerine' (right).**

Fig 22 *Schlumbergera truncata* **– 'White Fantasy' (left) with comparator 'White Christmas' (right).**

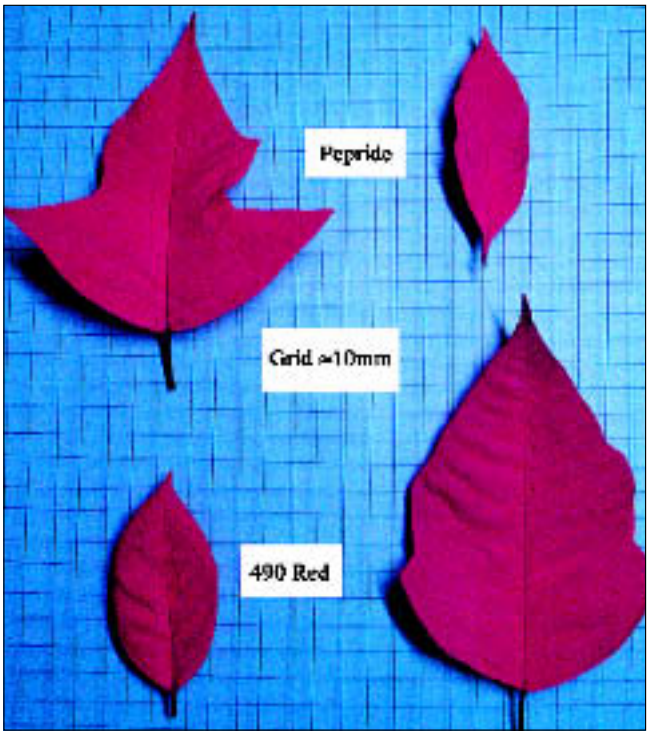


Fig 23 *Euphorbia pulcherrima* **– bracts of 'Pepride' (top) with comparator '490 Red'♁ (bottom).**

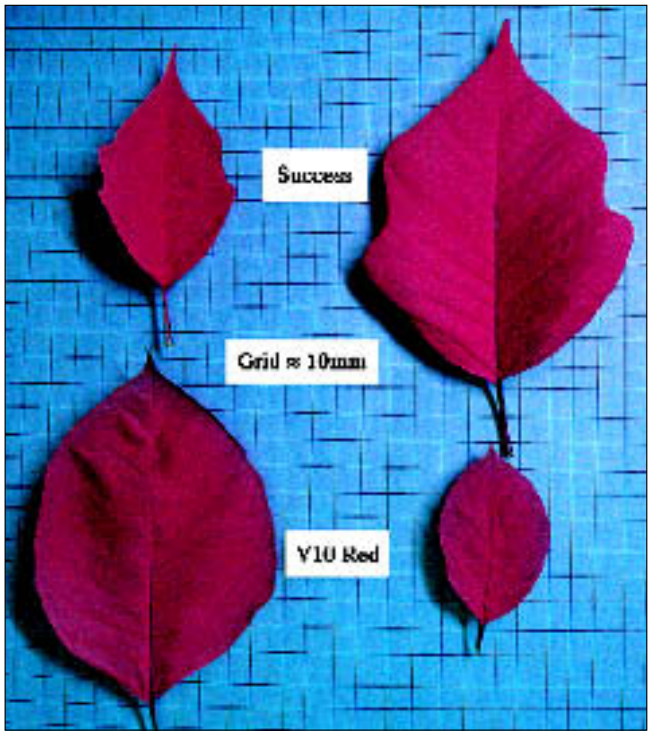


Fig 24 *Euphorbia pulcherrima* **– bracts of 'Success' (top) with comparator 'V10 Red' (bottom).**

Fig 25 *Chrysanthemum* x*multiflorum* **– flowers of 'Samco'.**

Fig 26 *Chrysanthemum* x*multiflorum* **– flowers of 'Tripoli'.**

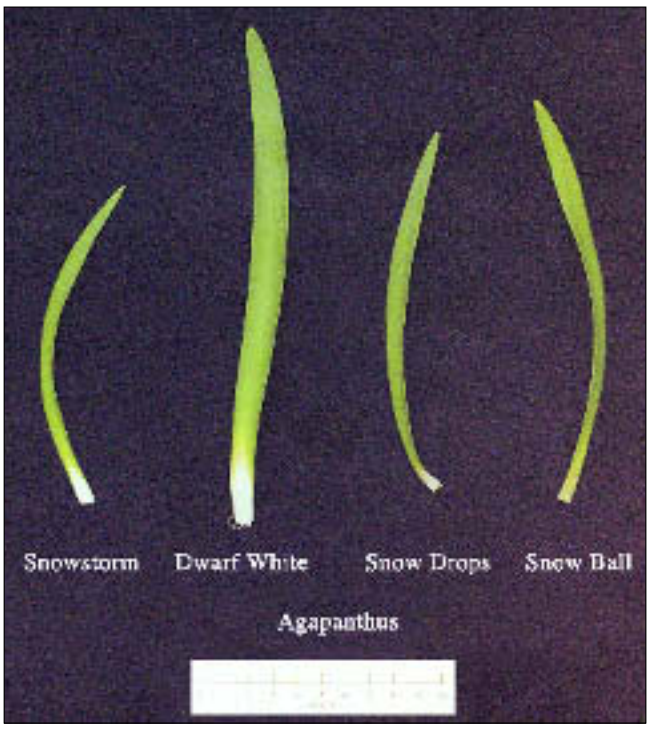


Fig 27 *Agapanthus* **– 'Snowstorm' (left) and comparators showing differences in leaf length.**

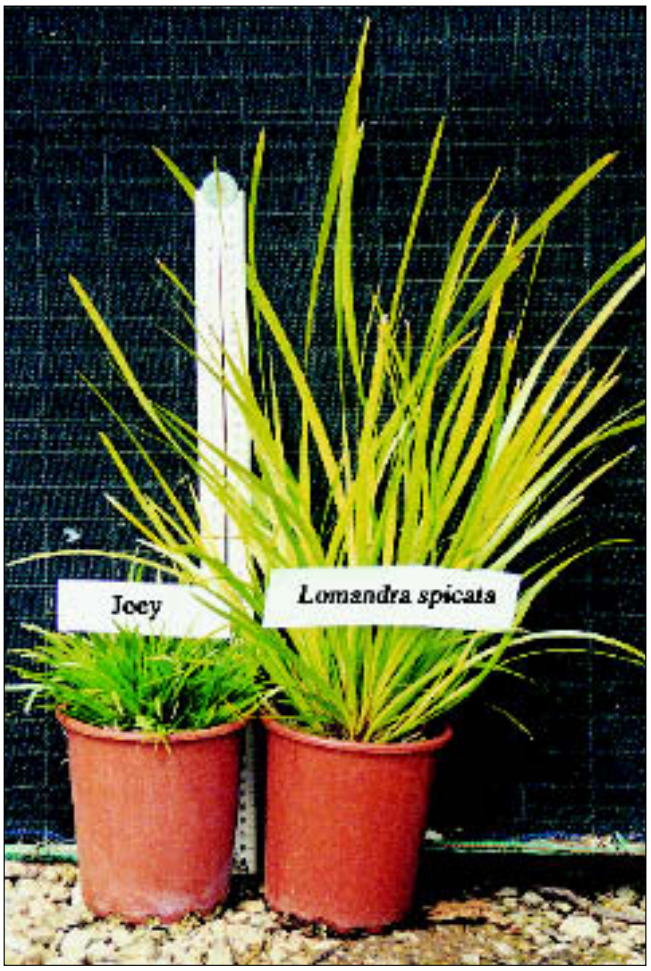


Fig 29 *Lomandra spicata* **– 'Joey' (left) with the parental form showing differences in plant height.**

Fig 28 *Caustis blakei* **subsp** *macrantha* **– 'Forest Fantasy' (left) with comparators** *Caustis blakei* **subsp** *macrantha* **(centre) and** *Caustis blakei* **subsp** *blakei* **(right) showing differences in number of plantlets and plantlet length at the second subculture**

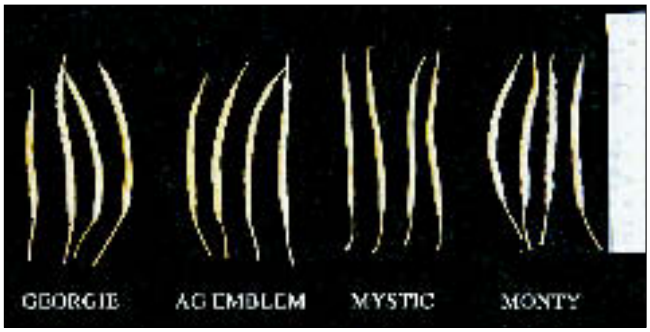


Fig 30 *Brassica napus* **– pods of 'Georgie' and 'AG Emblem' with comparators 'Mystic' and 'Monty'.**

Fig 31 *Brassica napus* **-pods of 'Bugle' with comparators 'Drum' and 'Karoo'.**

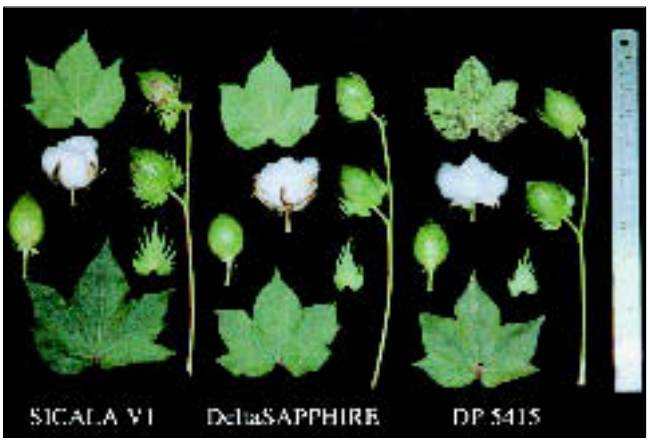


Fig 32 ***Gossypium hirsutum*** **– 'DeltaSAPPHIRE' (centre) with comparators 'DP 5415' (right) and 'Sicala V1' (left).**

Fig 33 ***Gossypium hirsutum*** **– 'DeltaTOPAZ' (centre) with comparators 'DP 5415' (right) and 'DeltaPEARL'♁ (left).**

Fig 34 ***Gossypium hirsutum*** **– leaf of 'NuPEARL ' (centre) with comparators 'NuCOTN 37' (right) and 'DeltaPEARL' ♁ (left) infested with *Helicoverpa armigera* larvae.**

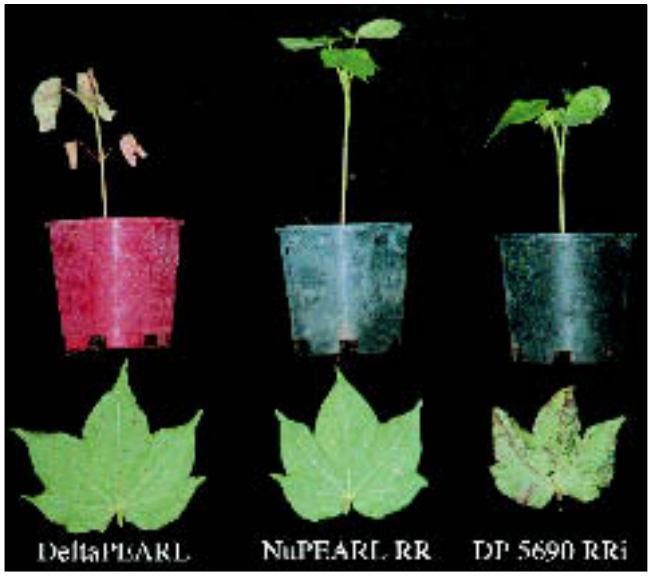


Fig 35 ***Gossypium hirsutum*** **– plant of 'NuPEARL RR' (centre) and 'DP 5690 RRi' (right) showing no sign of wilting after glyphosate application. 'DeltaPEARL'♁ (left) showing severe wilting after glyphosate application leading to plant death. 'NuPEARL RR' and 'DP 5690 RRi' could be differentiated by bacterial blight resistance showing in the leaves.**

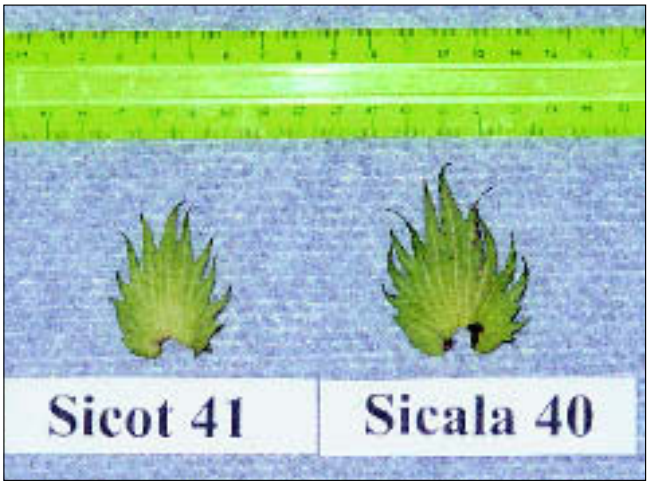


Fig 36 ***Gossypium hirsutum*** **– 'Sicot 41' and its comparator 'Sicala 40'♁ showing differences in bract length and width.**

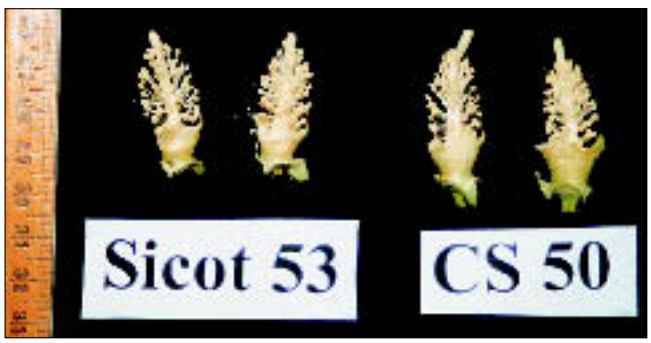


Fig 37 ***Gossypium hirsutum*** **– 'Sicot 53' and its comparator 'CS 50'♁ showing differences in stigma distance above the stamens.**

Fig 38 ***Gossypium hirsutum*** **– 'Siokra V-17' and its comparator 'Siokra V-16'♁ showing differences in length of first fruiting branch.**

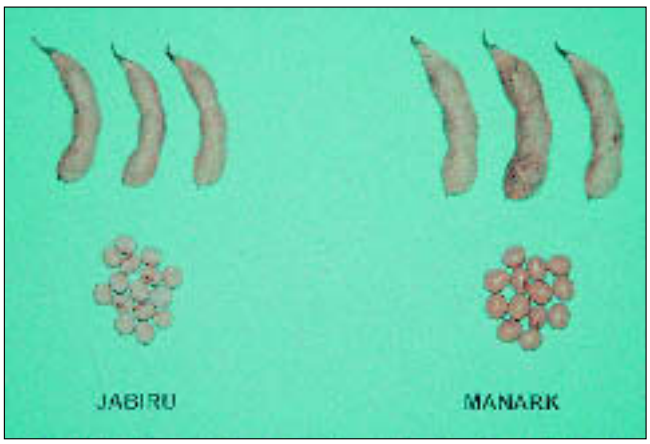


Fig 39 ***Glycine max*** **– pods (above) and seeds (below) of 'Jabiru' (left) and its comparator 'Manark'♁ (right).**

Fig 40 ***Hordeum vulgare*** **– 'Keel' (top left) with comparators showing differences in ear and awn length. 'Keel' (right) also shows relatively strong leaf, stem and head glaucosity.**

Fig 41 ***Pyrus communis*** **Fruits of 'Sophia's Gold' (left) with 'Packham Triumph' (right), and 'Josephine de Malines' (centre). Note differences in fruit size and fruit shape.**

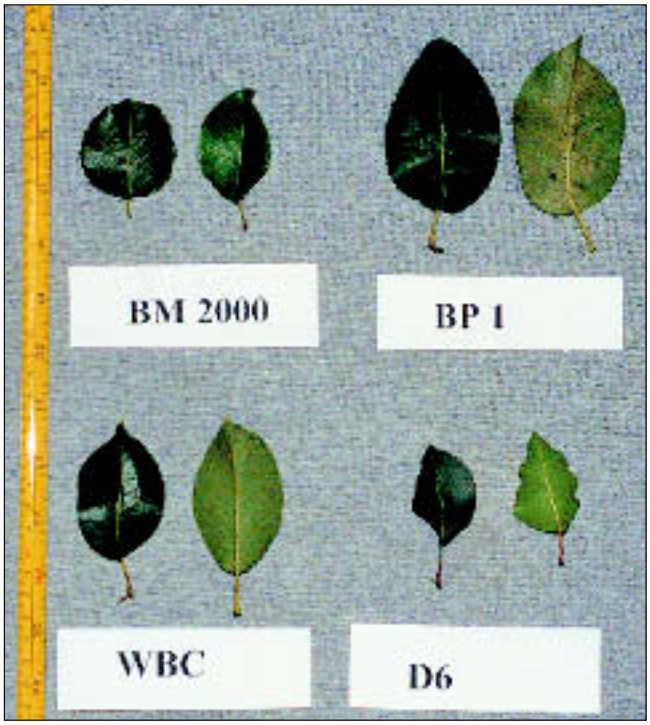


Fig 42 ***Pyrus communis*** **– leaves of 'BM 2000' with comparators showing differences in leaf shape and size.**

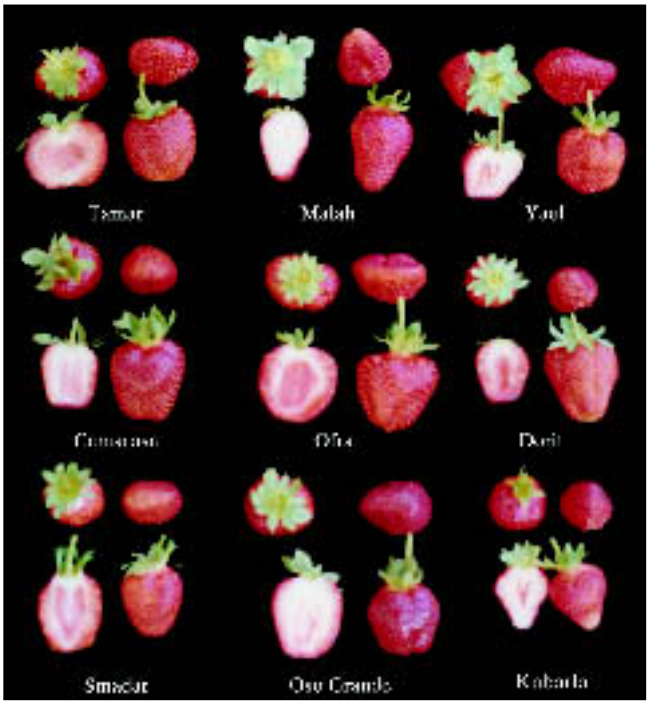


Fig 43 ***Fragaria xananassa*** **– 'Tamar', 'Malah', 'Yael' (top row left to right), 'Camarosa', 'Ofra', 'Dorit' (middle row left to right), 'Smadar', 'Oso Grande' and 'Kabarla' (bottom row left to right) showing differences in fruit characteristics.**

Fig 45 ***Mangifera indica*** **– fruit of 'Red1' (centre) and comparators 'R2E2' (left) and 'Kensington Pride' (right).**

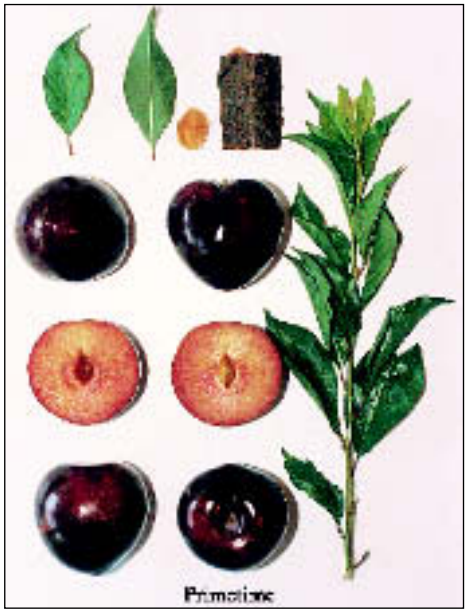


Fig 44 ***Fragaria xananassa*** **– 'Oso Grande', 'Tallara', 'Adina', 'Talee' (top row left to right), 'Mindaire', 'Coogee', 'Chandler', 'Pajaro' and 'Camarosa' (bottom row left to right) showing differences in fruit characteristics.**

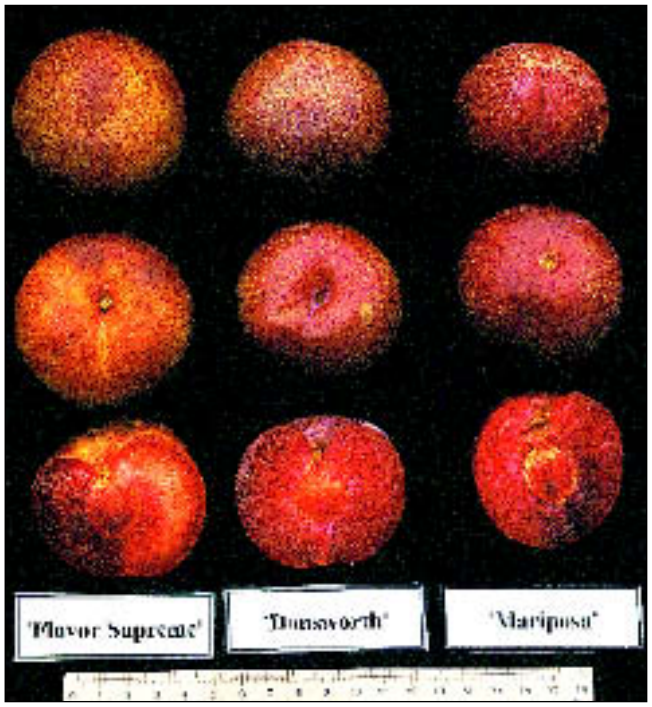
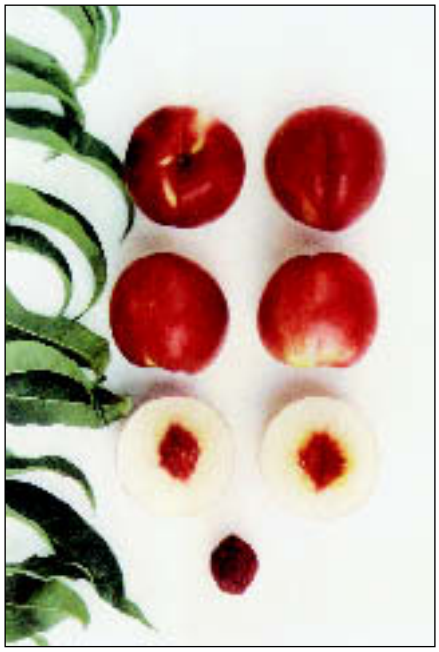
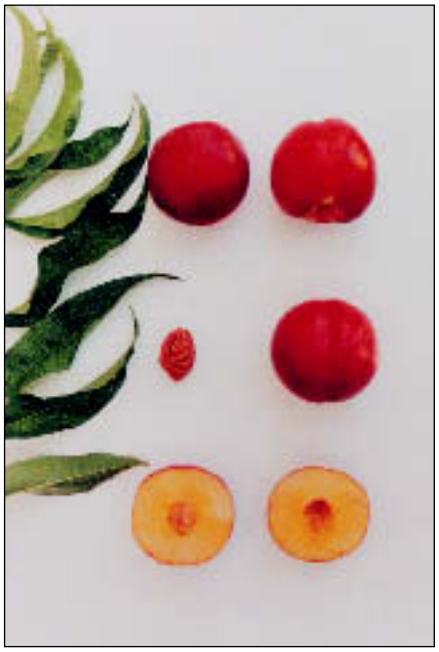


Fig 46 **(above)** ***Prunus*** **hybrid – fruits of 'Flavor Supreme' (left) with comparators 'Donsworth' (centre) and 'Mariposa' (right).**

Fig 47 **(left)** ***Prunus salicina*** **– fruits and plant parts of 'Primetime'.**





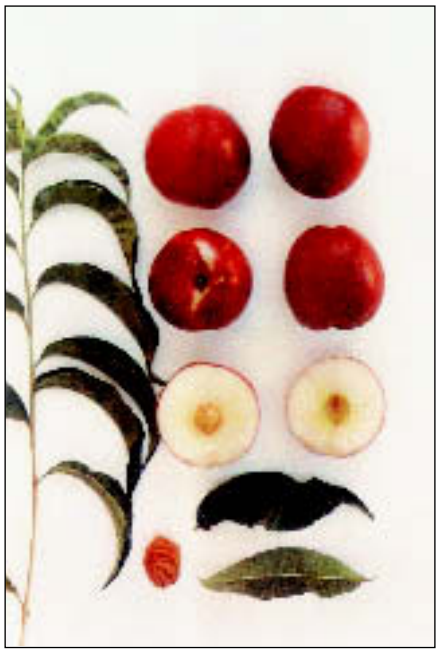


Fig 48 **(top left) *Prunus persica* var *nucipersica* – fruits, stone and leaves of 'Bright Pearl' syn Bright Ice.**

Fig 49 **(top right) *Prunus persica* var *nucipersica* – fruits, stone and leaves of 'Diamond Bright' syn Crimson Bright.**

Fig 50 **(above left) *Prunus persica* var *nucipersica* – fruits, stone and leaves of 'Fire Pearl' syn Fire Ice.**

Fig 51 **(above right) *Prunus persica* var *nucipersica* – fruits, stone and leaves of 'Grand Pearl' syn Grand Ice.**

Fig 52 **(left) *Prunus persica* var *nucipersica* – fruits, stone and leaves of 'June Pearl' syn June Ice.**

Fig 53 ***Prunus persica*** **var** ***nucipersica*** **– fruits, stone and leaves of 'Ruby Pearl' syn Ruby Ice.**

Fig 54 ***Prunus persica*** **var** ***nucipersica*** **– fruits, stone and leaves of 'Spring Sweet'.**

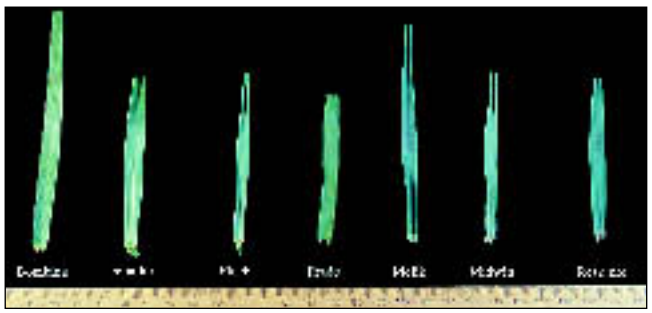


Fig 55 ***Festuca arundinacea*** **– 'Flecha' (3rd from left) with comparators showing differences in vegetative leaf width.**

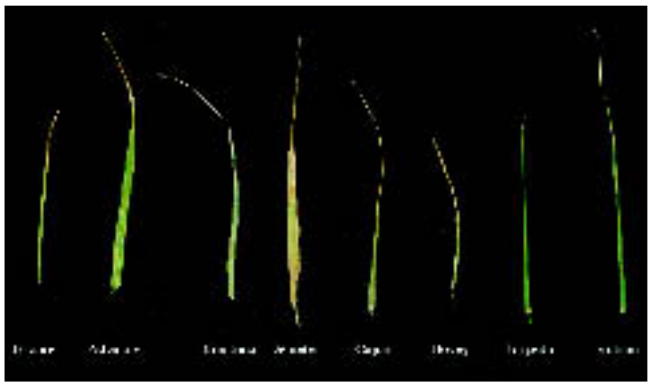


Fig 56 ***Festuca arundinacea*** **– 'Encore' (left) with comparators showing differences in flag leaf length.**

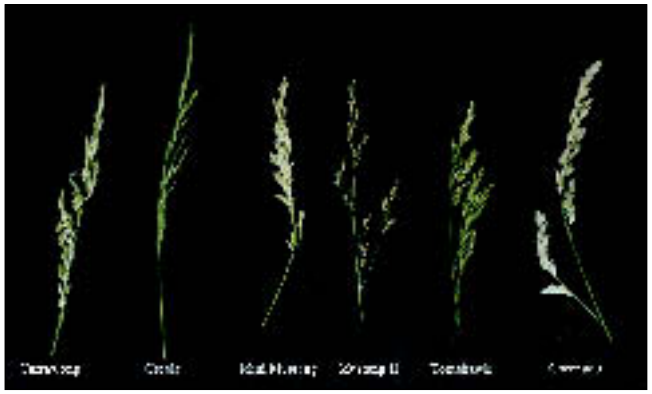


Fig 57 ***Festuca arundinacea*** **-'Currawong' (left) and 'Creole' (2nd from left) with comparators showing differences in spike length.**

Fig 58 (right) ***Medicago*** **hybrid – Top row: 'Toreador' (centre) with comparators "Rivoli', 'Herald', 'Tornafield' and 'Harbinger' showing pod size difference ('Rivoli' and 'Tornafield'), pod type ('Herald' and 'Harbinger') and opposite coil direction ('Rivoli' and 'Herald'). Bottom row: 'Toreador' (centre) with comparators 'Rivoli', 'Herald' and 'Tornafield' showing leaf mark differences.**

Fig 59 ***Medicago sativa*** **– flowering shoots of 'Alpha Express' (top left) with comparators 'Rapide' (top right), 'Hasawi' (bottom left) and 'CUF 101' (bottom right).**

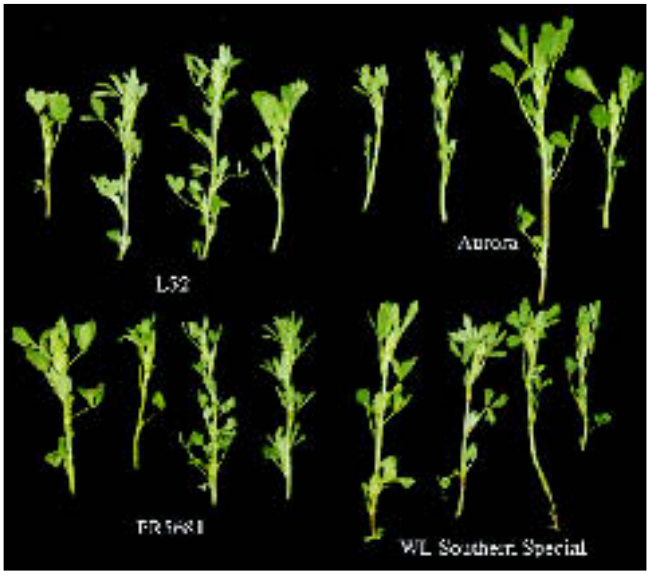


Fig 61 ***Medicago sativa*** **– 'PR5681' (bottom left) with comparators 'L52' (top left), 'Aurora' (top right) and 'WL Southern Special' (bottom right)**

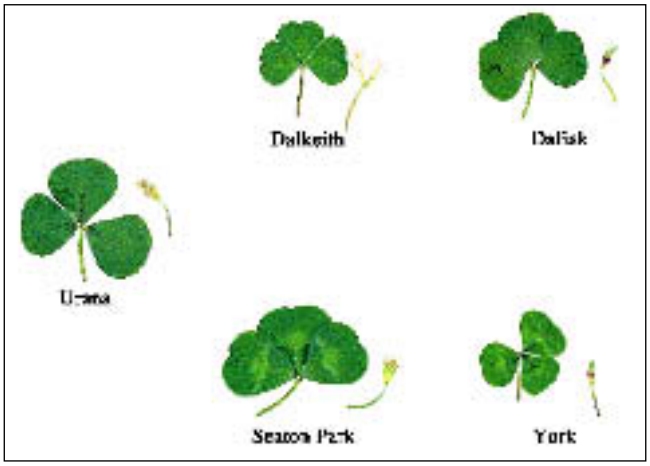


Fig 63 ***Trifolium subterraneum*** **– leaves and flowers of Urana (far left, centre) and comparator varieties, Dalkeith (top left), Daliak (top right), Seaton Park (bottom left) and York (bottom right).**

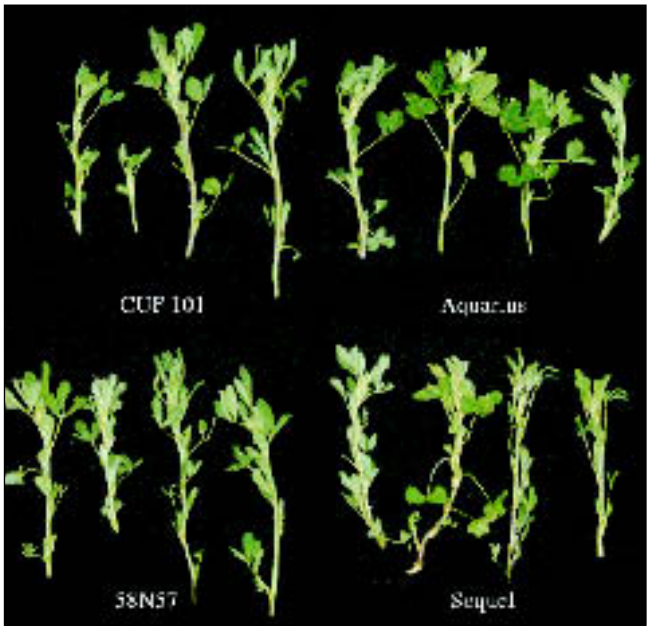


Fig 60 ***Medicago sativa*** **– '58N57' (bottom left) with comparators 'CUF101' (top left), 'Aquarius' (top right) and 'Sequel' (bottom right)**

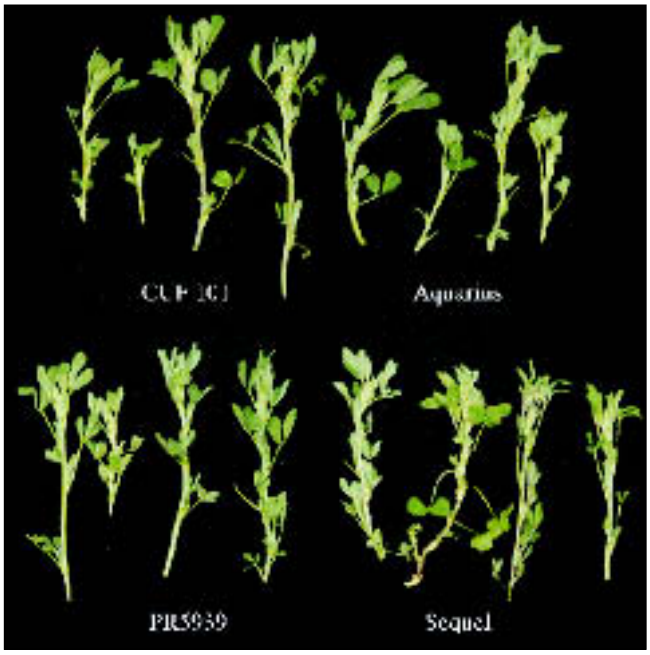


Fig 62 ***Medicago sativa*** **– 'PR5939' (bottom left) with comparators 'CUF101' (top left), 'Aquarius' (top right) and 'Sequel' (bottom right)**

Fragaria xananassa
Strawberry

'Adina'

Application No: 1996/291 Accepted: 14 Jan 1997.
Applicant: **Agriculture Victoria Services Pty Ltd,** Melbourne, VIC.

Characteristics (Table 14, Figure 44) Plant: habit flat globose, open plant density, medium vigour. Leaf: dark green, concave cross section, medium blistering, medium glossiness. Terminal leaflet: as long as broad, mean length 9.63 cm, acute base, incisions dentate and shallow, bracts tubular, petiole hairs perpendicular, petiole cross section flat, stipule anthocyanin colour weak. Stolon: number medium, anthocyanin colour medium. Flowers: early, level with foliage, primary flower very large, calyx same size as corolla, primary flower petals overlapping. Fruit: early ripening, very large, bright red, medium glossiness, shape short conic with pointed tip, as long as broad, narrow band without achenes, achenes level to slightly above surface, calyx level with the surface and clasping, calyx same diameter to slightly larger than fruit, adherence of calyx medium, flesh medium red both marginal and central, very firm. Bearing habit: short day.

Origin and Breeding Controlled pollination: seed parent Breeding line 88-042-35 x pollen parent 'Parker'Φ. The seed parent is characterised by early flowering, open plant density, large conical fruit, soft fruit, low production and short day bearing habit. The pollen parent was characterised by early flowering, open plant density, wedge fruit shape with meristematic tips, very firm fruit, high production and short day bearing habit. Hybridisation took place at IHD Knoxfield, VIC, Australia in 1989. From this cross, seedling number 89-064-2 was chosen in 1990 on the basis of fruit quality, open plant form, plant vigour and productivity. Selection criteria: uniform conic fruit shape, large fruit size, fruit firmness, yield, resistance to Two Spotted Mites and flavour. Propagation: pathogen tested Nucleus plants have been produced and runners grown in VIC and TAS for eight generations. Throughout this period 'Adina' was found to be uniform and stable. 'Adina' will be commercially propagated by runners from the nucleus plants. Breeder: Bruce J Morrison, IHD Knoxfield, VIC, Australia.

Choice of Comparators 'Talee', 'Camarosa', 'Coogee'Φ, 'Mindarie'Φ, 'Oso Grande'Φ, 'Chandler'Φ, 'Pajaro' and 'Tallara' were chosen as comparators because these are the similar varieties of common knowledge. The seed parent was excluded for reasons stated above.

Comparative Trial Location: Knoxfield, VIC (Latitude 37º52′ South, elevation 80m), spring-summer 1999/00. Conditions: trial conducted in the field, in open beds, as spaced plants, irrigated by T-tape, in full sun. Runner plants of 'Tallara', 'Coogee' and 'Mindarie' were grown in Tasmania, and 'Camarosa', 'Oso Grande', 'Chandler' and 'Pajaro' were grown in Toolangi, VIC. Dug May 5 and planted May 14 with nine days additional chill at 0ºC. Nutrition maintained with pre-plant application of 5:2:1 and potassium nitrate through the T-tape during the season. For pest and disease management no soil fumigation was used nor chemical control of pests or diseases except aphids. Two Spotted Mites were controlled by the introduction of predators. Trial design: plots of twenty plants in two replications in a randomised block design. Measurements: from 20 specimens at random from each plot.

Prior Applications and Sales Nil.

Description: **Bruce Morrison**, Agriculture Victoria, Knoxfield, VIC.

'Talee'

Application No: 1996/289 Accepted: 14 Jan 1997.
Applicant: **Agriculture Victoria Services Pty Ltd,** Melbourne, VIC.

Characteristics (Table 14, Figure 44) Plant: habit globose, dense, strong vigour. Leaf: light green, slightly concave cross section, medium blistering, strong glossiness. Terminal leaflet: much longer than broad, mean length 8.40cm, acute base, incisions dentate and deep, bracts leaflike and small, petiole hairs perpendicular, petiole cross section flat, stipule anthocyanin colour weak. Stolon: number many, anthocyanin colour weak. Flowers: early, level with foliage, calyx same size as corolla, primary flower petals overlapping. Fruit: early ripening, medium size, orange red, medium glossiness, shape conical with broad tip, longer than broad, narrow band without achenes, achenes level with the surface, calyx level with the surface and spreading, calyx larger than fruit diameter, adherence of calyx medium, flesh medium red both marginal and central, firm. Bearing habit: short day.

Origin and Breeding Controlled pollination: seed parent 'Chandler'Φ x pollen parent 'Pajaro'. The seed parent is characterised by early flowering, strong vigour, conical fruit shape, good flavour, soft fruit, high production and short day bearing habit. The pollen parent is characterised by early flowering, uniform large attractive conic fruit, poor vigour, low production and short day bearing habit. Hybridisation took place at IHD Knoxfield, VIC, Australia in 1990. From this cross, seedling number 90-008-793 was chosen in 1991 on the basis of fruit quality including flavour, plant vigour and productivity. Selection criteria: uniform conic fruit shape, large fruit size, fruit firmness, yield, resistance to Two Spotted Mites and flavour. Propagation: pathogen tested Nucleus plants have been produced and runners grown in VIC and TAS for eight generations. Throughout this period 'Talee' was found to be uniform and stable. 'Talee' will be commercially propagated by runners from the nucleus plants. Breeder: Bruce J Morrison, IHD Knoxfield, VIC, Australia.

Choice of Comparators 'Adina', 'Camarosa', 'Coogee'Φ, 'Mindarie'Φ, 'Oso Grande'Φ, 'Chandler'Φ, 'Pajaro' and 'Tallara' were chosen as comparators because these are the similar varieties of common knowledge. The both parents were included as a comparator in the trial.

Comparative Trial Location: Knoxfield, VIC (Latitude 37º52′ South, elevation 80m), spring-summer 1999/00. Conditions: trial conducted in the field, in open beds, as spaced plants, irrigated by T-tape, in full sun. Runner plants of 'Tallara', 'Coogee' and 'Mindarie' were grown in Tasmania, and 'Camarosa', 'Oso Grande', 'Chandler' and 'Pajaro' were grown in Toolangi, VIC. Dug May 5 and planted May 14 with nine days additional chill at 0ºC.

Nutrition maintained with pre-plant application of 5:2:1 and potassium nitrate through the T-tape during the season. For pest and disease management no soil fumigation was used nor chemical control of pests or diseases except aphids. Two Spotted Mites were controlled by the introduction of predators. Trial design: plots of twenty plants in two replications in a randomised block design. Measurements: from 20 specimens at random from each plot.

Prior Applications and Sales Nil.

Description: **Bruce Morrison**, Agriculture Victoria, Knoxfield, VIC.

'Tallara'

Application No: 1996/288 Accepted: 14 Jan 1997.
Applicant: **Agriculture Victoria Services Pty Ltd,** Melbourne, VIC.

Characteristics (Table 14, Figure 44) Plant: habit globose, medium dense, medium vigour. Leaf: medium green, concave cross section, weak blistering, medium glossiness. Terminal leaflet: much longer than broad, mean length 9.27cm, acute base, incisions dentate and shallow, bracts tubular, petiole hairs perpendicular to pointing upwards, petiole cross section shallow groove, stipule anthocyanin colour medium. Stolon: number medium, anthocyanin colour weak. Flowers: early, level with foliage, calyx same size as corolla, primary flower petals overlapping. Fruit: early ripening, large, bright red, strong glossiness, shape conical with concave sides which taper to a medium tip, longer than broad, narrow band without achenes, achenes level with the surface, calyx level with the surface and spreading, calyx same diameter as fruit, adherence of calyx weak, flesh medium red both marginal and central, very firm. Bearing habit: short day.

Origin and Breeding Controlled pollination: seed parent 'Parker'Φ x pollen parent 'Pajaro'. The seed parent is characterised by early flowering, open plant density, wedge fruit shape with meristematic tips, very firm fruit, high production and short day bearing habit. The pollen parent is characterised by early flowering, uniform large attractive conic fruit, poor vigour, low production and short day bearing habit. Hybridisation took place at IHD Knoxfield, VIC, Australia in 1988. From this cross, seedling number 88-022-296 was chosen in 1989 on the basis of fruit quality, plant vigour and productivity. Selection criteria: uniform conic fruit shape, large fruit size, fruit firmness, yield, resistance to Two Spotted Mites and flavour. Propagation: pathogen tested Nucleus plants have been produced and runners grown in VIC and TAS for eight generations. Throughout this period 'Tallara' was found to be uniform and stable. 'Tallara' will be commercially propagated by runners from the nucleus plants. Breeder: Bruce J Morrison, IHD Knoxfield, VIC, Australia.

Choice of Comparators 'Adina', 'Camarosa', 'Coogee'Φ, 'Mindarie'Φ, 'Oso Grande'Φ, 'Chandler'Φ, 'Pajaro' and 'Talee' were chosen as comparators because these are the similar varieties of common knowledge. The seed parent 'Parker'Φ was not considered for the trial due to the meristematic tips.

Comparative Trial Location: Knoxfield, VIC (Latitude 37º52′ South, elevation 80m), spring-summer 1999/00. Conditions: trial conducted in the field, in open beds, as spaced plants, irrigated by T-tape, in full sun. Runner plants of 'Tallara', 'Coogee' and 'Mindarie' were grown in Tasmania, and 'Camarosa', 'Oso Grande', 'Chandler' and 'Pajaro' were grown in Toolangi, VIC. Dug May 5 and planted May 14 with nine days additional chill at 0ºC. Nutrition maintained with pre-plant application of 5:2:1 and potassium nitrate through the T-tape during the season. For pest and disease management no soil fumigation was used nor chemical control of pests or diseases except aphids. Two Spotted Mites were controlled by the introduction of predators. Trial design: plots of twenty plants in two replications in a randomised block design. Measurements: from 20 specimens at random from each plot.

Prior Applications and Sales Nil.

Description: **Bruce Morrison**, Agriculture Victoria, Knoxfield, VIC.

Table 14 *Fragaria* varieties

	'Tallara'	'Talee'	'Adina'	*'Camarosa'	*'Coogee'(ϕ	*'Mindarie'(ϕ	*'Oso Grande'(ϕ	*'Chandler'(ϕ	*Pajaro
TERMINAL LEAF WIDTH (cm)									
mean	8.488	7.778	9.745	8.683	7.838	7.988	9.590	9.090	8.583
std. deviation	0.947	0.684	1.084	1.165	1.067	0.830	1.173	1.039	0.871
LSD/sig	0.782	ns	P≤0.01	ns	ns	ns	P≤0.01	ns	ns
PLANT DENSITY									
	medium	dense	open	medium	open	medium	medium	dense	medium
PLANT VIGOUR									
	medium	strong	medium	medium	weak	weak	strong	strong	medium
LEAF COLOUR									
	medium green	light green	dark green	medium green	medium green	medium green	medium green	light green	medium green
LEAF BLISTERING									
	weak	medium	medium	weak	weak	weak	weak	weak	weak
TERMINAL LEAFLET INCISIONS									
	dentate and shallow	dentate and deep	dentate and shallow	dentate and shallow	dentate and shallow	dentate and shallow	dentate and shallow	dentate and shallow	dentate and shallow
BRACTS									
	tubular	small and leaf like	tubular	small and leaf like	large and leaf like	small and leaf like	small and leaf like	large and leaf like	small and leaf like
PETIOLE CROSS SECTION									
	shallow groove	flat	flat	shallow groove	flat	shallow groove	shallow groove	flat	flat
STOLON NUMBER									
	medium	many	medium	medium	medium	medium	medium	many	medium
FRUIT – RATIO OF LENGTH TO WIDTH									
	much longer than broad	much longer than broad	as long as broad	longer than broad	longer than broad	longer than broad	broader than long	longer than broad	much longer than broad
PREDOMINANT FRUIT SHAPE									
	conical with narrow tip	conical with flat broad tip	short conic with pointed tip	necked to biconical tip	slightly necked to biconical	conical with broad tip	conical with broad tip	conical with broad tip	conical with narrow tip
FRUIT COLOUR									
	red	orange red	red	red	red	dark red	red	red	red
FRUIT FIRMNESS									
	very firm	firm	very firm	very firm	very firm	firm	firm	medium	firm
STIPULE ANTHOCYANIN COLOURATION									
	medium	weak	weak	weak	weak	medium	medium to strong	weak	strong

'Camarosa'

Application No: 1993/171 Accepted: 12 Aug 1993.
Applicant: **The Regents of the University of California,** Oakland, USA.
Agent: **Peter Maxwell and Associates,** North Parramatta, NSW.

Characteristics (Table 15, Figure 43) Growth habit: shape globose, bush medium dense, plant vigour strong. Leaf: colour upper surface dark green, cross section concave, surface blisters medium, pubescence moderate, leaflet number 3. Terminal leaflet: shape as broad as long towards longer than broad; mean length/width ratio 1.02), base obtuse, shape marginal teeth rounded. Petiole: pubescence heavy, orientation of hairs outwards. Petiole bracts: size very small, occurrence infrequent. Stipule anthocyanin colouration absent to very weak. Stolon: nil present (mid summer). Inflorescence just beneath leaf canopy. Flower: size medium (mean 30.5mm), size of calyx relative to corolla smaller, size of inner calyx relative to outer calyx generally same size, petal touching. Petal: shape as long as broad. Fruiting truss prostrate. Fruit: shape longer than broad (mean length/width ratio 1.21), size large to very large, predominant shape flat conical to almost cylindrical, slight difference in shape between primary and secondary fruit, band without achenes narrow towards medium, surface unevenness weak, colour red, colour even, glossiness medium, insertion of achenes slightly below surface, calyx level, pose calyx segments detached to reflexed, size of calyx in relation to fruit diameter larger, adherence of calyx strong, fruit firmness medium, colour of flesh medium red, evenness of flesh colour even, sweetness medium to strong, acidity medium, time of flowering early, type of bearing not remontant.

Origin and Breeding Controlled pollination: seed parent 'Douglas' x pollen parent CAL 85.218-605. Selection criteria: fruit early, firm fruit, and good yield. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: R.S. Bringhurst, D.V. Shaw, V. Voth; Davis, California, USA.

Choice of Comparators 'Oso Grande'(Ф) was selected as the comparator because it is a variety common knowledge with similar fruiting characteristics and flowering time Trials in USA showed that the candidate has substantially greater fruit firmness than 'Douglas'.

Comparative Trial Description based on US Plant Patent 8708, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1993	Granted	'Camarosa'
Italy	1993	Applied	'Camarosa'
Spain	1993	Surrendered	'Camaroas'
The Netherlands	1993	Terminated	'Camarosa'
New Zealand	1993	Granted	'Camarosa'
Argentina	1993	Granted	'Camarosa'
Canada	1993	Granted	'Camarosa'
Chile	1993	Granted	'Camarosa'
Portugal	1994	Withdrawn	'Camarosa'
UK	1994	Surrendered	'Camarosa'
Hungary	1997	Applied	'Camarosa'
Israel	1997	Applied	'Camarosa'
Poland	1997	Applied	'Camarosa'
EU	1997	Granted	'Camarosa'
South Africa	1997	Granted	'Camarosa'

First sold in USA in 1994. First Australian sale after 1993.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Dorit'

Application No: 1992/112 Accepted: 24 Aug 1992.
Applicant: **State of Israel, Ministry of Agriculture**, Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape flat globose, bush medium dense, plant vigour strong. Leaf: colour upper surface medium green, cross section concave, surface blisters weak, leaflet number sometimes 3 plus. Terminal leaflet: shape as broad as long (longer than broad; mean length/width ratio 1.07), base obtuse, shape marginal teeth rounded. Petiole: orientation of hairs outwards. Petiole bracts: size very small, occurrence most leaves. Stipules: anthocyanin colouration weak. Stolon: number many, anthocyanin colour medium, thickness medium, pubescence strong. Inflorescence beneath leaf canopy. Flower: size large (mean 33.7mm), size of calyx relative to corolla larger, size of inner calyx relative to outer calyx smaller, petal overlapping. Petal: shape as long as broad. Fruiting truss prostrate. Fruit: shape longer than broad (mean length/width ratio 1.25), size large, predominant shape bi-conical (conical and wedge), marked difference in shape between primary and secondary fruit, band without achenes narrow, surface unevenness weak, colour orange red, colour even, glossiness medium, achenes level with surface, calyx insertion level, pose calyx segments reflexed (clasping or detached), size of calyx in relation to fruit diameter same size, adherence of calyx strong, fruit firmness medium to firm, colour of flesh light orange red, evenness of flesh colour even, sweetness strong, acidity medium, time of flowering early, time of ripening early, type of bearing not remontant. (Note: data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: seed parent 'Nurit' x pollen parent 'Dover A' (77-163, Florida). Selection criteria: fruit very early, good fruit shape and size. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamai Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'Φ, 'Camarosa' and 'Kabarla'Φ were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1988	Granted	'Dorit'
France	1990	Granted	'Dorit'
Spain	1991	Surrendered	'Dorit'
USA	1991	Granted	'Dorit'
UK	1991	Terminated	'Dorit'
South Africa	1990	Granted	'Dorit'
EU	1995	Applied	'Dorit'

First sold in Israel in 1989. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Malah'

Application No: 1997/235 Accepted: 20 Oct 1997.
Applicant: **State of Israel, Ministry of Agriculture**, Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape globose, bush dense, plant vigour medium to (strong). Leaf: colour upper surface dark green, cross section concave, surface blisters medium, leaflet number sometimes 3 plus. Terminal leaflet: shape as broad as long; (mean length/width ratio 1.06), base obtuse shape marginal teeth rounded. Petiole: orientation of hairs outwards. Petiole bracts: size very small, leaf shape, occurrence infrequent: Stipule: anthocyanin colouration absent to very weak. Stolon: number very many, anthocyanin medium (to strong), thickness (medium to) thick, pubescence medium. Inflorescence above leaf canopy. Flower: size small (diameter mean 34.6mm), size of calyx relative to corolla same, size of inner calyx relative to outer calyx larger, petals touching. Petal: shape as long as broad. Fruiting truss prostrate. Fruit: shape much longer than broad (mean length/width ratio 1.44), size medium, predominant shape bi-conical, marked difference in shape between primary and secondary fruit, band without achenes medium, surface unevenness absent to very weak, colour orange red, colour uneven, glossiness medium, achenes insertion above (below) surface, calyx insertion in a basin, pose calyx segments clasping or detached, size of calyx in relation to fruit diameter larger, adherence of calyx strong, fruit firmness firm, colour of flesh light red, evenness of flesh colour uneven, sweetness strong, acidity medium, time of flowering medium, time of ripening medium, type of bearing not remontant. (Note: data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: seed parent 'Dorit' x 'Chandler'Φ. Selection criteria: fruit very early, good fruit shape, size and taste. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamai Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'Φ, 'Camarosa' and 'Kabarla'Φ were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time. The seed parent 'Dorit' was also included in the trial. The pollen parent 'Chandler'Φ, which flowers two months later that the candidate, was not included.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Granted	'Malah'
EU	1996	Applied	'Malah'
USA	1997	Granted	'Malah'
South Africa	2000	Applied	'Malah'

First sold in Israel in 1996. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Ofra'

Application No: 1992/114 Accepted: 22 Aug 1992.
Applicant: **State of Israel, Ministry of Agriculture,** Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape flat globose, bush medium density, plant vigour strong. Leaf: colour upper surface medium green, cross section concave, surface blisters weak, leaflet number sometimes 3 plus. Terminal leaflet: shape longer than broad (mean length to width ratio 1.12), base obtuse, shape marginal teeth obtuse. Petiole: orientation of hairs outwards. Petiole bracts: size very small. Stipules: anthocyanin colouration medium (weak). Stolon: number many, anthocyanin colour medium, thickness medium, pubescence strong. Inflorescence above leaf canopy. Flower: size medium

(mean diameter 32.6mm), size of calyx relative to corolla same, size of inner calyx relative to outer calyx larger, petals overlapping. Petal: shape mainly as long as broad. Fruiting truss prostrate. Fruit: shape longer than broad (mean length to width ratio 1.03), size large predominant shape wedge (and conical), shape difference between primary and secondary fruit moderate, band without achenes narrow to medium, surface unevenness absent to very weak, colour red, evenness of colour even, glossiness strong, achenes inserted below surface, calyx inserted set above fruit, pose calyx segments reflexed, size of calyx in relation to fruit diameter same size, adherence of calyx very strong, fruit firmness firm to very firm, colour of flesh orange red, evenness of flesh colour slightly uneven (to even), sweetness medium, acidity medium, time of flowering very early, time of ripening very early, type of bearing not remontant. (Note: data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: 'Parker'ф x Breeding line 111. Selection criteria: fruits very early, fruit quality good. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamai Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'ф, 'Camarosa' and 'Kabarla'ф were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time. Trials in Israel showed 'Rachel' differed in that it produced few stolons, flowers above leaf canopy, and insertion of achenes level with fruit surface. The seed parent 'Parker'ф differed in that pose of calyx segments clasping, predominant fruit shape conical, and insertion of calyx level, therefore was not included in the trial.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1991	Granted	'Ofra'
France	1991	Surrendered	'Ofra'
Italy	1991	Applied	'Ofra'
Spain	1991	Surrendered	'Ofra'
South Africa	1991	Granted	'Ofra'
USA	1992	Granted	'Ofra'
UK	1994	Granted	'Ofra'
EU	1995	Applied	'Ofra'

First sold Israel in 1991. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Smadar'

Application No: 1992/111 Accepted: 24 Aug 1992.
Applicant: **State of Israel, Ministry of Agriculture**, Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape flat globose, bush dense, plant vigour strong. Leaf: colour upper surface dark green, cross section concave, surface blisters (weak to) medium, leaflet number sometimes 3 plus. Terminal leaflet: shape longer than broad; (mean length/width ratio 1.23), base (obtuse to) rounded, shape marginal teeth obtuse. Petiole: orientation of hairs outwards. Petiole bracts: size very small, occurrence sporadic. Stipules: anthocyanin colouration absent/very weak. Stolon: number medium, anthocyanin colour strong, thickness thin, pubescence medium. Inflorescence level with (and beneath leaf canopy. Flower: size medium (mean 29.8mm), size of calyx relative to corolla smaller (to same), size of inner calyx relative to outer calyx same size, petals overlapping. Petal: shape longer than broad. Fruiting truss prostrate. Fruit: shape as broad as long (to longer, mean length/width ratio 1.29), size large, predominant shape bi-conical or cylindrical, slight difference in shape between primary and secondary fruit, band without achenes narrow, surface unevenness weak, colour red, colour slightly uneven, glossiness medium, achenes insertion below surface, calyx level, pose calyx segments clasping or detached, size of calyx in relation to fruit diameter larger, adherence of calyx strong, fruit firmness firm, colour of flesh light red, evenness of flesh colour even, sweetness strong, acidity medium, time of flowering very early to early, time of ripening very early to early, type of bearing not remontant. (Note: data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: seed parent 'Rachel' ('Nurit' x 'Pantagruella') x pollen parent 'Dover A'. Selection criteria: fruit very early, firm, good quality and red flesh. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamay Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'ф, 'Camarosa' and 'Kabarla'ф were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time. Trials in Israel showed 'Rachel' differed in that it produced few stolons, flowers above leaf canopy, and insertion of achenes level with fruit surface.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each

block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1989	Granted	'Smadar'
France	1990	Surrendered	'Smadar'
USA	1990	Granted	'Smadar'
South Africa	1990	Granted	'Smadar'
UK	1991	Terminated	'Smadar'
Spain	1991	Surrendered	'Smadar'

First sold Israel in 1990. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Tamar'

Application No: 1997/236 Accepted: 20 Oct 1997.
Applicant: **State of Israel, Ministry of Agriculture**, Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape globose, bush dense, plant vigour medium. Leaf: colour upper surface medium green, cross section concave, surface blisters medium, leaflet number sometimes 3 plus. Terminal leaflet: shape longer than broad; mean length/width ratio 1.11), base obtuse, shape marginal teeth rounded. Petiole: orientation of hairs outwards. Petiole bracts: size very small, occurrence sporadic. Stipules: anthocyanin colouration absent to weak. Stolon: number medium, anthocyanin colour weak, thickness medium, pubescence weak. Inflorescence above leaf canopy. Flower: size small (mean 32.5mm), size of calyx relative to corolla smaller (to same size), size of inner calyx relative to outer calyx same size, petal overlapping. Petal: shape broader than long. Fruiting truss prostrate. Fruit: shape longer than broad (mean length/width ratio 1.03), size medium, predominant shape conical (some wedge), moderate difference in shape between primary and secondary fruit, band without achenes narrow, surface unevenness absent to very weak, colour red, colour even, glossiness strong, achenes level with surface, calyx insertion in a basin, pose of calyx segments clasping or detached, size of calyx in relation to fruit diameter generally same size or smaller, adherence of calyx strong, fruit firmness soft, colour of flesh orange red, evenness of flesh colour even (slightly uneven), sweetness strong, acidity medium, time of flowering very early, time of ripening very early, type of bearing not remontant. (Note: data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: seed parent 'Oso Grande'Φ x pollen parent 'Dorit'. Selection criteria: fruits very early, good fruit shape and size. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamai Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'Φ, 'Camarosa' and 'Kabarla'Φ were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time. 'Oso Grande'Φ is the seed parent of 'Tamar'. The pollen parent 'Dorit' was also included in the trial.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Granted	'Tamar'
EU	1996	Applied	'Tamar'
USA	1997	Granted	'Tamar'
South Africa	2000	Applied	'Tamar'

First sold in Israel in 1996. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

'Yael'

Application No: 1997/234 Accepted: 20 Oct 1997.
Applicant: **State of Israel, Ministry of Agriculture**, Bet Dagan, Israel.
Agent: **Toolangi Strawberry Runner Growers Co-op,** Toolangi North, VIC.

Characteristics (Table 15, Figure 43) Growth habit: shape flat globose, bush medium dense, plant vigour strong. Leaf: colour upper surface (medium) to dark green, cross section concave, surface blisters weak, leaflet number sometimes 3 plus. Terminal leaflet: shape as broad as long (longer than broad mean length to width ratio 1.03), base shape obtuse, (towards rounded), marginal teeth rounded. Petiole: orientation of hairs outwards. Petiole bracts: size very small, Stipule: anthocyanin colouration weak (strong). Stolon: number many, anthocyanin colour medium (to strong), thickness medium, pubescence strong. Inflorescence generally level with leaf canopy. Flower: size small (mean diameter 32.7mm), size of calyx relative to corolla same size, size of inner calyx relative to outer calyx larger, petal touching. Petal: shape broader than long. Fruiting truss prostrate. Fruit: shape slightly longer than broad, (mean length to width ratio 1.01) predominant shape conical, size large to very large, difference between primary and secondary fruit slight, band without achenes narrow, surface unevenness absent to very weak, colour red, evenness of colour even, glossiness medium, achenes inserted below surface, calyx inserted in a basin, pose calyx segments clasping or detached, size of calyx in relation to fruit diameter larger, adherence of calyx strong, fruit firmness firm, colour of flesh orange, evenness of flesh colour slightly uneven, sweetness medium, acidity medium, time of flowering medium, time of ripening medium, type of bearing not remontant. (Note: Data in parenthesis is of local observations.)

Origin and Breeding Controlled pollination: seed parent 'Oso Grande'ϕ x pollen parent 'Dorit'. Selection criteria: fruits very early, good fruit shape and size. Propagation: vegetatively via runners through numerous generations and found stable. Breeders: Eva Izsak and Shamai Izhar, Bet Dagan, Israel.

Choice of Comparators 'Oso Grande'ϕ, 'Camarosa' and 'Kabarla'ϕ were selected as comparators because these are varieties of common knowledge with similar fruiting characteristics and flowering time. 'Oso Grande'ϕ is the seed parent of 'Yael'. The pollen parent 'Dorit' was also included in the trial.

Comparative Trial Description based on official Israeli PBR documents, and data confirmed by local observations and measurements. Location: Wandin, VIC, summer 1998/1999. Conditions: trial conducted in open under natural climatic conditions. Freshly dug runners planted end of autumn (May) using standard cultural methods for production crops. Grown on raised beds covered with black plastic sheeting. Soil well-structured red medium clay, to which slow release-fertiliser applied, drip irrigated as required. Protective sprays applied to maintain plant health. Plants not clothed. Trial design: planted in two rows, spacing 40cm as randomised blocks of 20 plants, each block replicated twice. Minimum 40 plants along with comparator varieties. Measurements: selected at random, and minimum of 20 measurements taken for statistical analyses.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Israel	1995	Granted	'Yael'
EU	1996	Applied	'Yael'
USA	1997	Granted	'Yael'
South Africa	2000	Applied	'Yael'

First sold in Israel, 1996. First Australian sale in 1998.

Description: **Brian C Hanger,** Rosemary Ridge Pty Ltd, Monbulk, VIC.

Table 15 *Fragaria* varieties

	'Smadar'	'Dorit'	'Ofra'	'Yael'	'Malar'	'Tamar'	*'Oso Grande'ϕ	'Camarosa'	*'Kabarla'ϕ
PLANT: HABIT									
	flat globose	flat globose	flat globose	globose	globose	globose	globose	globose	flat
PLANT: DENSITY									
	dense	medium	medium	dense	dense	dense	medium	dense	open
PLANT: VIGOUR									
	strong	strong	strong	strong	medium to strong	medium	medium	strong	weak
LEAF: COLOUR									
	dark	medium	medium	light to medium	dark	medium	medium to dark	dark	light to medium
TERMINAL LEAFLET: LENGTH (mm)									
mean	83.3g	94.5ef	102.9bcd	106.4abc	96.9def	111.7a	90.0fg	102.0cde	104.5abcd
std deviation	7.4	10.8	8.1	10.7	9.7	7.1	5.6	10.6	11.2
TERMINAL LEAFLET: WIDTH (mm)									
mean	68.0d	88.0c	92.4c	103.7a	91.2c	101.0a	93.6bc	100.3ab	87.3c
std deviation	6.6	9.4	7.8	9.8	9.4	5.4	4.1	10.2	9.5
TERMINAL LEAFLET: RATIO LENGTH TO WIDTH									
mean	1.23a	1.07cd	1.12bc	1.03de	1.06cd	1.11bcd	0.96e	1.02de	1.20a
std deviation	0.11	0.08	0.07	0.06	0.05	0.03	0.05	0.08	0.08
TERMINAL LEAFLET: SHAPE OF BASE									
	obtuse	rounded	obtuse	obtuse to rounded	obtuse	obtuse	obtuse to rounded	obtuse	obtuse
STOLONS: NUMBER PER PLANT (early to mid summer)									
	occasional	medium	nil to occasional	medium	medium	medium	occasional	nil	medium to many
STOLONS: ANTHOCYANIN COLOURATION									
	strong	weak to medium	weak to medium	strong	medium to strong	absent to weak	strong	no stolons	strong

STOLONS: THICKNESS									
	thin to medium	medium	medium	thick	thick	medium	medium	no stolons	medium
STOLONS : PUBESCENCE									
	medium	strong	medium	weak	medium	weak	weak to medium	no stolons	weak
FLOWER: DIAMETER (mm)									
mean	29.8g	33.7abcd	32.6cde	32.7bcde	34.6a	32.5de	31.5ef	30.5fg	29.3g
std deviation	1.9	2.2	2.2	1.7	1.6	1.9	1.5	1.8	2.1
FLOWER: CALYX SIZE RELATIVE TO COROLLA									
	smaller	larger	same size	same size	same size	smaller	smaller	same size	same size
FLOWER: INNER CALYX RELATIVE TO OUTER CALYX									
	same size	smaller	larger	larger	larger	same size	same size	same size	same size
FLOWER: RELATIVE POSITION OF PETALS									
	overlapping	overlapping	overlapping	touching	touching	overlapping	touching	touching	overlapping
FRUIT: SIZE									
	large	large	large	large	medium to large	medium	large	large	medium
FRUIT: LENGTH (mm)									
mean	39.9cd	43.4bc	40.4cd	40.3cd	52.9a	37.8d	41.4bcd	45.4b	39.2cd
std deviation	2.0	5.2	5.6	3.2	5.3	3.9	4.3	3.3	5.9
FRUIT: WIDTH (mm)									
mean	31.1c	34.7bc	39.1a	39.9a	36.7ab	37.3ab	38.5ab	37.7ab	37.7ab
std deviation	3.3	3.5	5.2	3.6	2.5	5.9	2.8	1.4	6.5
FRUIT: RATIO LENGTH TO WIDTH									
mean	1.29b	1.25b	1.03c	1.01c	1.44a	1.03c	1.08c	1.21b	1.05c
std deviation	0.1	0.09	0.12	0.06	0.14	0.12	0.08	0.1	0.07
FRUIT: PREDOMINANT SHAPE									
	bi-conical	bi-conical	conical	conical	bi-conical	conical	conical and wedge	almost cylindrical and flat conical	conical
FRUIT: DIFFERENCE BETWEEN PRIMARY AND SECONDARY FRUIT									
	slight	marked	moderate	slight	marked	moderate	slight	slight	very slight
FRUIT: BAND WIDTH WITHOUT ACHENES									
	narrow	narrow	narrow to medium	narrow	medium	narrow	narrow	narrow to medium	narrow
FRUIT: COLOUR									
	red	orange red	red	red	orange red	red	red	red	red
FRUIT: EVENNESS OF COLOUR									
	slightly uneven	even	even	even	uneven	even	even	even	even
FRUIT: GLOSSINESS									
	medium	medium	strong	medium	medium	strong	strong	medium	medium
FRUIT: INSERTION OF ACHENES									
	below	level	below	below	below	level	below	below	below
FRUIT: INSERTION OF CALYX									
	level	level	above	in	in	in	level	in	level
FRUIT: POSE OF CALYX									
	clasping	reflexed	reflexed	clasping	clasping	clasping	clasping	clasping	clasping

Note: the mean values followed by the same letters are not significantly different at P≤ 0.01 according to Duncan's Multiple Range Test

Glycine max
Soybean

'Jabiru'

Application No: 2000/094 Accepted: 1 Jun 2000.
Applicant: **The State of Queensland through its Department of Primary Industries,** Brisbane, QLD.

Characteristics (Table 16, Figure 39) Plant: erect, mean height at maturity 74cm, pubescence grey. Stem: anthocyanin absent. Leaf: trifoliate, hairy. Leaflet: large, ovate, mean length of central leaflet 99mm, mean width 50mm. Flower: colour white. Pod: hairy, colour tan, mean length 39mm, mean width 8.3mm. Seed: spherical, seed coat yellow, lustre dull, hilum buff, mean weight 0.138g. Disease reactions: bacterial pustule immune, soybean mosaic virus tolerant, *Phytophthora* root rot races 1, 4 and 15 high levels of field resistance, downy mildew tolerant.

Origin and Breeding Controlled pollination and recurrent selection: 4 cycles of recurrent selection for grain yield within a population based on 17 parents chosen for their high yield potential in Queensland and their wide genetic diversity. The base population was established in 1981 using a diallel cross mating system and three cycles of intermating. The selection was based solely on seed yield of S_1 lines grown at Hermitage Research Station. The selection intensity was approximately 10%. In 1989, 44 high yielding S_1 families were selected after four cycles of recurrent selection. Selection E115-6 was derived from the seed of a single S_4 plant grown in the field in 1992. This was later named as 'Jabiru'. Selection criteria: grain yield, *Phythophthora* resistance and agronomic characters. Propagation: by seed. Breeder: JL Rose, QDPI, Warwick, QLD.

Choice of Comparators 'Manark'(ф), 'Dragon', 'Davis', 'Centaur', 'A6785', 'A6297', and '9791'(ф) were initially considered for the comparative trial as these are similar varieties of common knowledge.
'Dragon' and 'Centaur' were later excluded for their longer pod length. '9791' was excluded because of its susceptibility to downy mildew. A6785 and A6297 were excluded because they flowered earlier than 'Jabiru.' 'Manark'(ф) was finally chosen because it most closely resembles 'Jabiru'. 'Davis' was also chosen because it was one of the parents of the original breeding population. The other parents were not included because of their wide genetic diversity and are easily distinguishable from the candidate.

Comparative Trial Location: Hermitage Research Station, Warwick, QLD, Dec 1997-May 1998. Conditions: plants raised in black clay soil in the field, irrigation applied when necessary. Trial design: 300 plants arranged in randomised complete blocks with three replicates. Measurements: on 30 random plants.

Prior Applications and Sales Nil.

Description: **John Rose,** Warwick, QLD.

Table 16 *Glycine* varieties

	'Jabiru'	*'Manark'(ф)	*'Davis'
LEAF LENGTH (mm)			
mean	99.2	101.3	90.1
std deviation	7.2	11.6	7.8
LSD/sig	4.6	ns	P≤0.01
POD WIDTH (mm)			
mean	8.35	9.80	9.33
std deviation	0.52	0.52	0.51
LSD/sig	0.23	P≤0.01	P≤0.01
SEED			
lustre	dull	shiny	dull
weight (g)	0.138	0.168	0.154
RESISTANCE TO *Phytophthora* ROOT AND STEM ROT			
race 1	field resistant	field resistant	field resistant
race 4	field resistant	field resistant	field resistant
race 15	field resistant	susceptible	susceptible

Gossypium hirsutum
Cotton

'DeltaSAPPHIRE'

Application No: 1999/352 Accepted: 1 Mar 2000.
Applicant: **Deltapine Australia Pty Ltd,** Narrabri, NSW.

Characteristics (Table 17, Figure 32) Plant: semi-cluster, cylindrical growth habit, height medium, medium maturity. Leaf: palmate, density high, size medium, leaf pubescence along leaf veins moderate, gossypol and nectary glands present. Fruiting branches: internode length medium. Flower: petals cream. Bolls: elliptic, size medium, prominence of boll tip weak, peduncle length medium, bracts medium, boll opening medium to strong, lint percentage high. Fibre: length long, strength medium, uniformity index medium and micronaire medium. Disease: bacterial blight resistant, *Verticillium* wilt tolerance good, *Fusarium* wilt tolerance moderate.

Origin and Breeding Controlled pollination: seed parent 'DP 5415' x pollen parent 'Sicala V1' in a planned breeding program. The seed parent is characterised as a full season maturity, medium height, bushy plant type with good heat tolerance. The pollen parent is characterised by mid season maturity, early fruiting, large boll size, bacterial blight disease resistance and *Verticillium* wilt tolerance. Hybridisation took place at Goondiwindi, QLD in 1992. Single plants were selected in the F_2 generation and progeny row selection continued in the F_3 and F_4 generations. The final selection was tested in replicated yield and fibre trials from 1994-1998. Selection criteria: disease tolerance, yield, plant maturity and fibre quality. Propagation: by seed. Breeder: Richard Leske, Deltapine Australia Pty Ltd, Goondiwindi, QLD.

Choice of Comparators 'DP 5415' was chosen because it is the original seed parent. This variety was previously developed by Delta & Pine Land Co, Scott, MS, USA. 'Sicala V1' was chosen because as it is the original pollen parent used in the cross. This variety has been developed by the Cotton Research Unit, CSIRO, Narrabri, NSW.

Comparative Trial Location: "Koarlo", Goondiwindi, QLD, summer 1999-2000. Conditions: trial conducted in the field, plants grown from seed, row spacing 1m, commercial rates of fertiliser, herbicides and insecticides applied as required, trial fully irrigated. Trial design: 10 replicates of each variety sown in rows 1 x 12m arranged in a randomised completed block design. Measurements: morphological plant characteristics measured from 10 non-tipped plants per replicate, one measurement per plant. Fibre quality samples hand picked from a 1.5 metre section in each replicate and analysed by HVI instrument testing.

Prior Applications and Sales
No prior applications. First sold in Australia in Sep 1999.

Description: **Richard Leske,** Deltapine Australia Pty. Ltd., Goondiwindi, QLD.

Table 17 *Gossypium* varieties

	'Delta SAPPHIRE'	*'DP 5415'	*'Sicala V1'
NUMBER OF VEGETATIVE NODES			
mean	6.75	5.34	6.71
std deviation	0.26	0.21	0.20
LSD/sig	0.29	P≤0.01	ns
LEAF LENGTH (mm)			
mean	95.77	99.67	100.47
std deviation	1.87	1.97	4.34
LSD/sig	3.31	P≤0.01	P≤0.01
LEAF WIDTH (mm)			
mean	125.80	121.47	131.71
std deviation	2.50	3.83	5.07
LSD/sig	4.23	P≤0.01	P≤0.01
LENGTH FROM 1ST TO 2ND FRUITING POSITION (mm)			
mean	77.27	87.78	80.81
std deviation	6.92	6.69	8.66
LSD/sig	7.70	P≤0.01	ns
BOLL PEDUNCLE LENGTH (mm)			
mean	19.70	19.65	21.99
std deviation	0.56	0.91	1.16
LSD/sig	0.96	ns	P≤0.01
BOLL LENGTH (mm)			
mean	39.86	40.99	44.62
std deviation	0.80	1.17	1.14
LSD/sig	1.55	ns	P≤0.01
BOLL WIDTH (mm)			
mean	30.06	28.87	32.19
std deviation	0.82	0.86	0.88
LSD/sig	1.13	P≤0.01	P≤0.01
BRACT LENGTH (mm)			
mean	48.67	46.54	53.43
std deviation	1.72	0.98	1.63
LSD/sig	1.82	P≤0.01	P≤0.01
BRACT WIDTH (mm)			
mean	30.30	26.32	32.77
std deviation	1.34	1.59	1.44
LSD/sig	1.65	P≤0.01	P≤0.01
LINT PERCENTAGE (%)			
mean	44.1	41.6	43.5
std deviation	0.8	0.4	0.6
LSD/sig	0.9	P≤0.01	ns
FIBRE STRENGTH (g/tex)			
mean	30.64	29.41	30.60
std deviation	0.46	0.79	1.04
LSD/sig	0.88	P≤0.01	ns
FIBRE ELONGATION			
mean	14.07	14.31	10.58
std deviation	1.11	1.06	0.48
LSD/sig	0.98	ns	P≤0.01
FIBRE MICRONAIRE			
mean	4.21	4.66	4.42
std deviation	0.21	0.25	0.22
LSD/sig	0.25	P≤0.01	ns
BACTERIAL BLIGHT DISEASE	resistant	susceptible	resistant

'DeltaTOPAZ'

Application No: 1999/353 Accepted: 1 Mar 2000.
Applicant: **Deltapine Australia Pty Ltd,** Narrabri, NSW.

Characteristics (Table 18, Figure 33) Plant: semi-cluster, conical growth habit, height medium, medium – full maturity. Leaf: palmate, density and size medium, pubescence along leaf veins slight, gossypol and nectary glands present. Fruiting branches: internode length medium – long. Flower: petals cream. Bolls: elliptic, size medium, prominence of tip medium, peduncle medium, bract medium, boll opening medium, lint percentage high. Fibre: length medium, strength medium, uniformity index medium, micronaire medium. Disease: Bacterial blight resistant, *Verticillium* wilt tolerance moderate, *Fusarium* wilt tolerance moderate.

Origin and Breeding Controlled pollination: seed parent F_1 ('DP 5415' x 'Siokra L22') x pollen parent 'DP 5415'. The recurrent parent 'DP 5415' is characterised by its compact bushy habit, heat tolerance, and susceptibility to bacterial blight disease. 'Siokra L22' is characterised by its okra leaf shape, good fibre quality and bacterial blight disease resistance. Hybridisation took place in Goondiwindi, QLD in 1992. Single plants were selected in the F_2 generation and progeny row selection continued in the F_3 and F_4 generations. The final selection was tested in replicated yield and fibre trials from 1995-1998. Selection criteria: yield, fibre quality, plant growth habit and bacterial blight disease resistance. Propagation: by seed. Breeder: Richard Leske, Deltapine Australia Pty Ltd, Goondiwindi, QLD.

Choice of Comparators 'DP 5415', 'Siokra L22' and 'DeltaPEARL'(ϕ) were initially considered as comparators as these are similar varieties of common knowledge. 'DP 5415' was chosen because it is the variety used as the recurrent parent in the backcross program. 'Siokra L22' is bred by the CSIRO Cotton Research Unit, Narrabri, NSW, but was excluded as it has an okra leaf and is easily distinguished from the new variety, which has palmate

leaves. 'DeltaPEARL'Φ was chosen as the most similar variety in plant characteristics.

Comparative Trial Location: "Koarlo", Goondiwindi, QLD, summer 1999-2000. Conditions: trial conducted in the field, plants grown from seed, row spacing 1m, commercial rates of fertiliser, herbicides and insecticides applied as required, trial fully irrigated. Trial design: 10 replicates of each variety sown in rows 1 x 12m arranged in a randomised completed block design. Measurements: morphological plant characteristics measured from 10 non-tipped plants per replicate, one measurement per plant. Fibre quality samples hand picked from a 1.5 metre section in each replicate and analysed by HVI instrument testing.

Prior Applications and Sales
No prior applications. First sold in Australia in Sep 1999.

Description: **Richard Leske,** Deltapine Australia Pty. Ltd., Goondiwindi, QLD.

Table 18 *Gossypium* varieties

	'DeltaTOPAZ'*'DP 5415'	*'DeltaPEARL'Φ	
LENGTH FROM 1ST TO 2ND FRUITING POSITION (mm)			
mean	102.37	87.78	82.73
std deviation	6.91	6.69	10.52
LSD/sig	9.74	P≤0.01	P≤0.01
BOLL LENGTH (mm)			
mean	46.37	38.78	43.00
std deviation	0.42	2.41	2.65
LSD/sig	3.3	P≤0.01	ns
BOLL WIDTH (mm)			
mean	34.71	28.47	30.63
std deviation	0.14	2.75	2.63
LSD/sig	4.2	P≤0.01	ns
BRACT LENGTH (mm)			
mean	48.8	42.64	47.43
std deviation	0.78	4.09	2.11
LSD/sig	5.07	P≤0.01	ns
BRACT WIDTH (mm)			
mean	28.91	22.57	29.91
std deviation	0.96	2.55	2.70
LSD/sig	4.66	P≤0.01	ns
LINT PERCENTAGE (%)			
mean	44.2	41.6	43.3
std deviation	0.7	0.4	0.5
LSD/sig	0.9	P≤0.01	P≤0.01
FIBRE LENGTH (in)			
mean	1.12	1.11	1.15
std deviation	0.02	0.02	0.01
LSD/sig	0.02	ns	P≤0.01
FIBRE ELONGATION			
mean	13.79	14.31	11.56
std deviation	0.61	1.06	0.69
LSD/sig	0.74	ns	P≤0.01
FIBRE MICRONAIRE			
mean	4.73	4.66	4.37
std deviation	0.16	0.25	0.16
LSD/sig	0.21	ns	P≤0.01
BACTERIAL BLIGHT DISEASE	resistant	susceptible	resistant

'NuPEARL'

Application No: 1999/354 Accepted: 1 Mar 2000.
Applicant: **Deltapine Australia Pty Ltd,** Narrabri, NSW.

Characteristics (Table 19, Figure 34) Plant: semi-cluster, conical growth habit, height tall, maturity medium – full. Leaf: palmate, density medium, size medium – large, pubescence along mid veins slight, gossypol and nectary glands present. Fruiting branches: internode length medium. Flower: petals cream. Bolls: elliptic, size medium, prominence of tip medium, peduncle length medium, bracts medium, boll opening strong, lint percentage high. Fibre: length medium, strength medium, uniformity index medium and micronaire medium. Disease: bacterial blight resistant, verticillium wilt tolerance moderate, fusarium wilt tolerance moderate. Insect control: *Bt*-transgene incorporated for lepidopteran insect control.

Origin and Breeding Controlled pollination: seed parent 'DeltaPEARL'Φ x pollen parent 'NuCOTN 37' followed by 2 backcrosses to the recurrent parent 'DeltaPEARL'Φ. The seed parent is characterised as a tall, full season plant type with bacterial blight resistance and consistent yield ability. The pollen parent is used to introduce the transgenic BT (INGARD®) insect tolerance trait. Hybridisation took place in Deltapine Australia's glasshouse located at "Locharba", Narrabri, NSW. Progeny row selection was conducted at Goondiwindi, QLD. The final selection was tested in replicated yield and fibre trials from 1998-2000. Selection criteria: INGARD® trait, disease tolerance, yield and fibre quality. Propagation: by seed. Breeders: Richard Leske, Deltapine Australia Pty Ltd, Goondiwindi, QLD, and Geoff Smart, Deltapine Australia Pty Ltd, "Locharba", Narrabri, NSW.

Choice of Comparator 'DeltaPEARL'Φ was chosen because it is the original seed parent used in the cross. 'DeltaPEARL'Φ was developed by Deltapine Australia Pty Ltd. 'NuCOTN 37' was chosen because it is the original pollen parent used in the cross. This variety was bred by Delta and Pine Land Co, Scott, MS, USA.

Comparative Trial. Location 1: Locharba, Narrabri, NSW – insect bioassay test. Conditions: Insect Bioassay – mid-sized young leaves removed from small plants and placed inside plastic tubs lined with agar to ensure leaf viability, leaves infested with five 1st instar *Helicoverpa* larvae, leaves assessed 5 days post treatment for insect feeding damage. Trial design: randomised completed block with 20 replicates per variety, one leaf per plant. Location 2: "Koarlo", Goondiwindi, QLD, – a field trial for measuring plant characteristics was grown during the summer 1999-2000. Conditions: trial conducted in the field, plants grown from seed, row spacing 1m, commercial rates of fertiliser, herbicides and insecticides applied as required, trial fully irrigated. Trial design: 10 replicates of each variety sown in

rows 1 x 12m arranged in a randomised completed block design. Measurements: morphological plant characteristics measured from 10 non-tipped plants per replicate, one measurement per plant. Fibre quality samples hand picked from a 1.5 metre section in each replicate and analysed by HVI instrument testing.

Prior Applications and Sales
No prior applications. First sold in Australia in Sep 1999.

Description: **Richard Leske,** Deltapine Australia Pty. Ltd., Goondiwindi, QLD.

Table 19 *Gossypium* varieties

	'NuPEARL'	***'NuCOTN 37'**	***'DeltaPEARL'**ф
PLANT HEIGHT (mm)			
mean	887.55	862.25	811.15
std deviation	32.67	48.60	47.67
LSD/sig	43.65	ns	P≤0.01
NUMBER OF VEGETATIVE NODES			
mean	6.16	6.08	5.11
std deviation	0.26	0.32	0.24
LSD/sig	0.30	ns	P≤0.01
LEAF LENGTH (mm)			
mean	101.25	104.57	101.07
std deviation	2.27	2.55	3.72
LSD/sig	3.01	P≤0.01	ns
LEAF WIDTH (mm)			
mean	128.35	132.48	124.73
std deviation	2.98	3.69	5.64
LSD/sig	4.06	P≤0.01	ns
LENGTH TO 1ST FRUITING POSITION (mm)			
mean	120.53	139.62	111.62
std deviation	16.86	14.24	14.26
LSD/sig	14.93	P≤0.01	ns
LENGTH FROM 1ST TO 2ND FRUITING POSITION (mm)			
mean	99.41	102.16	82.73
std deviation	12.95	9.00	10.52
LSD/sig	12.61	ns	P≤0.01
BOLL PEDUNCLE LENGTH (mm)			
mean	25.34	23.42	20.68
std deviation	1.38	1.22	2.01
LSD/sig	1.64	P≤0.01	P≤0.01
BOLL LENGTH (mm)			
mean	40.11	42.08	40.73
std deviation	0.94	0.76	1.38
LSD/sig	0.96	P≤0.01	ns
BOLL WIDTH (mm)			
mean	29.28	29.13	30.42
std deviation	0.77	0.53	1.07
LSD/sig	0.96	ns	P≤0.01
BRACT LENGTH (mm)			
mean	44.63	48.33	45.42
std deviation	1.11	1.53	1.48
LSD/sig	1.53	P≤0.01	ns
LINT PERCENTAGE (%)			
mean	41.3	43.0	43.3
std deviation	0.7	0.6	0.5
LSD/sig	0.8	P≤0.01	P≤0.01
FIBRE LENGTH (in)			
mean	1.14	1.11	1.15
std deviation	0.02	0.02	0.01
LSD/sig	0.02	P≤0.01	ns
FIBRE ELONGATION			
mean	10.88	12.03	11.56
std deviation	0.43	0.66	0.69
LSD/sig	0.69	P≤0.01	P≤0.01
BACTERIAL BLIGHT DISEASE	resistant	susceptible	resistant
INSECT BIO-ASSAY (1- 5 scale)*			
mean	1.65	1.35	4.75

*1 = no damage, 2 = very minor damage, 3 =medium damage, 4 = severe damage, 5 = totally damaged.

'NuPEARL RR'

Application No: 1999/355 Accepted: 1 Mar 2000.
Applicant: **Deltapine Australia Pty Ltd,** Narrabri, NSW.

Characteristics (Table 20, Figure 35) Plant: semi-cluster, conical growth habit, height tall, maturity medium – full. Leaf: palmate, density medium, size medium – large, pubescence along mid veins slight, gossypol and nectary glands present. Fruiting branches: internode length medium. Flower: petals cream. Bolls: elliptic, size medium, prominence of tip medium, peduncle length medium, bracts medium, boll opening strong, lint percentage high. Fibre: length medium, strength medium, uniformity index medium and micronaire medium. Disease: bacterial blight resistant, *Verticillium* wilt tolerance moderate, *Fusarium* wilt tolerance moderate. Insect control: *Bt* transgene incorporated for lepidopteran insect control. Herbicide tolerance: Roundup Ready® transgene incorporated.

Origin and Breeding Controlled pollination: seed parent 'DeltaPEARL'ф x pollen parent 'DP 5690 RRi' followed by 2 backcross cycles to the recurrent parent 'DeltaPEARL'ф. The seed parent is characterised as a tall, full season plant type with bacterial blight resistance and consistent yield ability. The pollen is used to introduce both the transgenic *Bt* (INGARD®) insect tolerance trait and Roundup Ready® (RR) herbicide tolerance trait. Hybridisation took place in Deltapine Australia's glasshouse located at "Locharba", Narrabri, NSW. Progeny row selection was conducted at Goondiwindi, QLD. The final selection was tested in replicated yield and fibre trials from 1998-2000. Selection criteria: INGARD® and Roundup Ready® traits, disease tolerance, yield and fibre quality. Propagation: by seed. Breeders: Richard Leske, Deltapine Australia Pty Ltd, Goondiwindi, QLD, and Geoff Smart, Deltapine Australia Pty Ltd, "Locharba", Narrabri, NSW.

Choice of Comparators 'DeltaPEARL'ф was chosen because it is the original seed parent used in the cross. DeltaPEARL'ф was developed by Deltapine Australia Pty Ltd. 'DP 5690 RRi' was chosen because as it is the original

pollen parent used in the cross. This variety was bred by Delta and Pine Land Co, Scott, MS, USA.

Comparative Trial Location 1: Locharba, Narrabri, NSW – insect bioassay and Roundup® spraying tests. Conditions: Insect Bioassay – mid-sized young leaves removed from small plants and placed inside plastic tubs lined with agar to ensure leaf viability, leaves infested with five 1st instar *Helicoverpa* larvae, leaves assessed 5 days post treatment for insect feeding damage. Trial design: randomised completed block with 20 replicates per variety, one leaf per plant. Herbicide tolerance – young plants hand sprayed with Roundup® herbicide at rate of 2l/ha when first true leaves had emerged, plants scored at 3, 7 and 14 days post treatment for a range of plant character symptoms. Trial Design: randomised completed block with 20 replicates per variety. Location 2: "Koarlo", Goondiwindi, QLD, – a field trial for measuring plant characteristics was grown during the summer 1999-2000. Conditions: trial conducted in the field, plants grown from seed, row spacing 1m, commercial rates of fertiliser, herbicides and insecticides applied as required, trial fully irrigated. Trial design: 10 replicates of each variety sown in rows 1 x 12m arranged in a randomised completed block design. Measurements: morphological plant characteristics measured from 10 non-tipped plants per replicate, one measurement per plant. Fibre quality samples hand picked from a 1.5 metre section in each replicate and analysed by HVI instrument testing.

Prior Applications and Sales Nil.

Description: **Richard Leske,** Deltapine Australia Pty. Ltd., Goondiwindi, QLD.

Table 20 *Gossypium* varieties

	'NuPEARL RR'	***'DP 5690 RRi'**	***'Delta PEARL'**ф
PLANT HEIGHT (mm)			
mean	806.75	769.40	738.50
std deviation	39.40	37.00	37.70
LSD/sig	43.22	ns	P≤0.01
NUMBER OF VEGETATIVE NODES			
mean	6.10	6.08	5.11
std deviation	0.21	0.28	0.24
LSD/sig	0.26	ns	P≤0.01
BOLL PEDUNCLE LENGTH (mm)			
mean	22.14	24.04	20.68
std deviation	0.84	1.88	2.01
LSD/sig	1.83	P≤0.01	ns
BOLL LENGTH (mm)			
mean	38.57	40.83	40.73
std deviation	1.05	1.25	1.38
LSD/sig	1.35	P≤0.01	P≤0.01
BOLL WIDTH (mm)			
mean	30.14	28.90	30.42
std deviation	0.97	1.02	1.07
LSD/sig	1.09	P≤0.01	ns
BRACT LENGTH (mm)			
mean	48.54	48.05	45.42
std deviation	1.42	1.74	1.48
LSD/sig	1.78	ns	P≤0.01
LINT PERCENTAGE (%)			
mean	43.3	41.8	43.3
std deviation	0.8	0.6	0.5
LSD/sig	0.7	P≤0.01	ns
FIBRE LENGTH (in)			
mean	1.11	1.12	1.15
std deviation	0.03	0.01	0.01
LSD/sig	0.03	ns	P≤0.01
FIBRE STRENGTH (g/tex)			
mean	28.30	30.77	29.82
std deviation	0.63	0.84	0.70
LSD/sig	0.84	P≤0.01	P≤0.01
BACTERIAL BLIGHT DISEASE	resistant	susceptible	resistant
HERBICIDE EFFECT: LEAF BLOTCHING (1- 5 scale)*			
[1]DAS 3 mean	1.50	1.40	2.50
DAS 7 mean	2.40	2.20	4.05
HERBICIDE EFFECT: PLANT WILT (1- 5 scale)*			
DAS 3 mean	1.00	1.00	1.70
DAS 7 mean	1.00	1.00	2.75
HERBICIDE EFFECT: YOUNG LEAF FOLDING (1- 5 scale)*			
DAS 7 mean	1.00	1.00	3.60
HERBICIDE EFFECT: TERMINAL CHLOROSIS (1- 5 scale)*			
DAS 3 mean	1.00	1.00	1.40
DAS 7 mean	1.00	1.00	3.40
HERBICIDE EFFECT: PLANT DEATH (1- 2 scale)**			
DAS 14 mean	1	1	2
INSECT BIO-ASSAY (1- 5 scale)***			
mean	1.35	1.15	4.75

[1]DAS = days after spraying; scoring was done at 3, 7 and 14 days after herbicide application.
*1 = no effect, 2 = slight effect, 3 =medium effect, 4 = strong effect, 5 = very strong effect.
** 1 = plants alive, 2 = plants dead.
*** 1 = no damage, 2 = very minor damage, 3 =medium damage, 4 = severe damage, 5 = totally damaged

'Sicot 41'

Application No: 1999/266 Accepted: 23 Sep 1999.
Applicant: **CSIRO Plant Industry,** Cotton Research Unit, Narrabri, NSW.

Characteristics (Table 21, Figure 36) Plant: shape conical, height short, early maturity (169 days to mature), medium foliage density. Leaf: palmate, very slight pubescence of midrib, gossypol and nectary glands present. Flower: colour of petals cream. Boll: size large, shape elliptical, pitting of surface fine, length of peduncle short (mean 23mm), prominence of tip medium, opening medium, bract size large (46x30 mm). Seeds: density of fuzz medium. Lint: proportion high (0.40), length medium (30.1mm), strength medium (31 g/tex), micronaire value medium (4.2). Disease: resistant to bacterial blight (*Xanthomonas campestris pv malvacearum*), good tolerance to verticillium wilt (*Verticillium dahliae*).

Origin and Breeding Controlled pollination: seed parent 88001 x pollen parent 83055-33 in a planned breeding program at Australian Cotton Research Institute (ACRI), Narrabri, NSW. The seed parent is distinguished by its earliness and segregating leaf shape. The pollen parent is distinguished by its later maturity. Two cycles of single plant selection (in the 1989/90 and 1992/93 seasons) followed by progeny row and multiple environment trials were carried out. Selection criteria: plant habit, resistance to bacterial blight and verticillium wilt, leaf hairiness, normal leaf shape, fibre quality and yield. Propagation: by seed. Breeder: Mr P E Reid, CSIRO, Narrabri, NSW.

Choice of Comparators 'Sicala 40'ф was chosen as the sole comparator because it is the most similar variety with normal leaf shape and is a sister line of 'Sicot 41'. The parents were excluded for the reasons stated above.

Comparative Trials Trial location (morphology): ACRI, Narrabri, NSW, 1999/2000 summer. Conditions: field grown irrigated trial with conventional management. Trial design: 25 entry trial in a row and column design with four replicates and three rows x 14m plots. Measurements: morphological measurements on 10 plants from each plot. Trial location (fibre quality): 13 trial locations from Warren, NSW to Emerald, QLD, 1997/98 and 1998/99 summer. Conditions: field grown irrigated trials with conventional management. Trial design: 60 entry trials in a row and column design with four replicates and three or four row x 14m plots. Measurements: lint % and fibre quality measurements taken on a 400g subsample from the whole centre row harvest. Fibre quality was measured on a Zellweger Uster HVI 900 instrument.

Prior Application and Sales
First sold in Australia in Sep 1998.

Description: **Peter Reid,** CSIRO Plant Industry, Cotton Research Unit, Narrabri, NSW.

Table 21 *Gossypium* varieties

	'Sicot 41'	***'Sicala 40'**ф
BRACT LENGTH (mm)		
mean	45.8	50.7
std deviation	1.6	1.5
LSD/sig	2.7	P≤0.01
BRACT WIDTH (mm)		
mean	29.8	32.1
std deviation	2.3	2.1
LSD/sig	2.0	P≤0.01
LINT %		
mean	40.47	39.73
std deviation	0.95	1.10
LSD/sig	0.53	P≤0.01
FIBRE QUALITY CHARACTERISTICS		
LENGTH (mm)		
mean	30.05	29.72
std deviation	0.81	0.74
LSD/sig	0.23	P≤0.01
UNIFORMITY INDEX (%)		
mean	84.30	84.85
std deviation	1.08	1.22
LSD/sig	0.30	P≤0.01
STRENGTH (g/tex)		
mean	31.00	32.57
std deviation	1.41	1.72
LSD/sig	0.48	P≤0.01
EXTENSION (%)		
mean	5.67	5.37
std deviation	1.55	1.46
LSD/sig	0.21	P≤0.01

'Sicot 53'

Application No: 1999/264 Accepted: 23 Sep 1999.
Applicant: **CSIRO Plant Industry,** Cotton Research Unit, Narrabri, NSW.

Characteristics (Table 22, Figure 37) Plant: shape conical, height medium, medium maturity (176 days to mature), medium foliage density. Leaf: palmate, very slight pubescence of midrib, gossypol and nectary glands present. Flower: colour of petals cream, stigma distance above stamens medium (mean 3.3mm). Boll: size small, shape elliptical, pitting of surface fine, length of peduncle short (mean 25mm), prominence of tip medium, opening medium, bract size small. Seeds: density of fuzz medium. Lint: proportion high (0.41), length medium (29.8mm), strength medium (31g/tex), micronaire value medium (4.0). Disease: resistant to bacterial blight (*Xanthomonas campestris pv malvacearum*), susceptible to verticillium wilt (*Verticillium dahliae*).

Origin and Breeding Controlled pollination: seed parent line 183 x pollen parent 'CS 50'ф in a planned breeding program at Australian Cotton Research Institute (ACRI), Narrabri, NSW. The seed parent is distinguished by its susceptibility to bacterial blight. The pollen parent is distinguished by its greater stigma protrusion and by its longer, weaker and less extensible fibre. Single plant selection followed by progeny row and multiple environment trials were carried out. Selection criteria: plant habit, resistance to bacterial blight, leaf hairiness, fibre quality and yield in hot environments. Propagation: by seed. Breeder: Dr GA Constable, CSIRO, Narrabri, NSW.

Choice of Comparators 'CS 50'ф was chosen because it is the pollen parent and has similar regional adaptation to 'Sicot 53'. The seed parent Line 183 was not considered for the reason stated above.

Comparative Trials Trial location (morphology): ACRI, Narrabri, NSW, 1999/2000 summer. Conditions: field grown irrigated trial with conventional management. Trial design: 25 entry trial in a row and column design with four replicates and three rows x 14m plots. Measurements: morphological measurements on 10 plants from each plot. Trial location (fibre quality): 13 trial locations from Warren, NSW to Emerald, QLD, 1997/98 and 1998/99 summer. Conditions: field grown irrigated trials with conventional management. Trial design: 60 entry trials in a row and column design with four replicates and three or four row x

14m plots. Measurements: lint % and fibre quality measurements taken on a 400g subsample from the whole centre row harvest. Fibre quality was measured on a Zellweger Uster HVI 900 instrument.

Prior Application and Sales
First sold in Australia in Sep 1999.

Description: **Greg Constable,** CSIRO Plant Industry, Cotton Research Unit, Narrabri, NSW.

Table 22 *Gossypium* varieties

	'Sicot 53'	*'CS 50'Φ
STIGMA DISTANCE ABOVE STAMENS (mm)		
mean	3.3	5.0
std deviation	0.9	0.6
LSD/sig	1.2	P≤0.01
FIBRE QUALITY CHARACTERISTICS		
LENGTH (mm)		
mean	29.82	30.07
std deviation	1.02	0.89
LSD/sig	0.23	P≤0.01
STRENGTH (g/tex)		
mean	31.01	30.49
std deviation	1.78	1.79
LSD/sig	0.48	P≤0.01
EXTENSION (%)		
mean	6.03	5.73
std deviation	1.75	1.63
LSD/sig	0.21	P≤0.01

'Siokra V-17'

Application No: 1999/265 Accepted: 23 Sep 1999.
Applicant: **CSIRO Plant Industry,** Cotton Research Unit, Narrabri, NSW.

Characteristics (Table 23, Figure 38) Plant: shape conical, height medium, medium maturity (174 days to mature), medium foliage density. Leaf: digitate (okra), very slight pubescence of midrib, gossypol and nectary glands present. Flower: colour of petals cream, stigma distance above stamens medium (mean 3.4mm). Boll: size large, shape elliptical, pitting of surface fine, length of peduncle long (mean 29mm), prominence of tip medium, opening medium, bract size large. Seeds: density of fuzz medium. Lint: proportion high (0.41), length medium (29.3mm), strength medium (31 g/tex), micronaire value medium (4.1). Disease: resistant to bacterial blight (*Xanthomonas campestris pv malvacearum*), good tolerance to verticillium wilt (*Verticillium dahliae*).

Origin and Breeding Controlled pollination: seed parent 'Siokra V-15'Φ x pollen parent 'Sicala V-2'Φ in a planned breeding program at Australian Cotton Research Institute (ACRI), Narrabri, NSW. The seed parent is distinguished by its lower lint % and longer fibre. The pollen parent is distinguished by its normal leaf shape. Single plant selection followed by progeny row and multiple environment trials were carried out. Selection criteria: plant habit, resistance to bacterial blight, fusarium wilt and verticillium wilt, leaf hairiness, okra leaf shape, fibre quality and yield. Propagation: by seed. Breeder: Mr P E Reid, CSIRO, Narrabri, NSW.

Choice of Comparators 'Siokra V-16'Φ was chosen as the sole comparator because it is the most similar variety with okra leaf shape and is a selection from the seed parent 'Siokra V-15'Φ. The parents were excluded for the reasons stated above.

Comparative Trials Trial location (morphology): ACRI, Narrabri, NSW, 1999/2000 summer. Conditions: field grown irrigated trial with conventional management. Trial design: 25 entry trial in a row and column design with four replicates and three rows x 14m plots. Measurements: morphological measurements on 10 plants from each plot. Trial location (fibre quality): 13 trial locations from Warren, NSW to Emerald, QLD, 1997/98 and 1998/99 summer. Conditions: field grown irrigated trials with conventional management. Trial design: 60 entry trials in a row and column design with four replicates and three or four row x 14m plots. Measurements: lint % and fibre quality measurements taken on a 400g subsample from the whole centre row harvest. Fibre quality was measured on a Zellweger Uster HVI 900 instrument.

Prior Application and Sales
First sold in Australia in Sep 1999.

Description: **Peter Reid,** CSIRO Plant Industry, Cotton Research Unit, Narrabri, NSW.

Table 23 *Gossypium* varieties

	'Siokra V-17'	*'Siokra V-16'Φ
FRUITING BRANCH FIRST INTERNODE (mm)		
mean	80.6	112.7
std deviation	18.8	7.4
LSD/sig	22.3	P≤0.01
LINT %		
mean	40.88	39.10
std deviation	1.15	1.15
LSD/sig	0.53	P≤0.01
FIBRE QUALITY CHARACTERISTICS		
LENGTH (mm)		
mean	29.26	30.81
std deviation	0.71	0.74
LSD/sig	0.23	P≤0.01
UNIFORMITY INDEX (%)		
mean	84.30	84.98
std deviation	1.13	1.00
LSD/sig	0.30	P≤0.01
STRENGTH (g/tex)		
mean	30.84	32.36
std deviation	1.32	1.50
LSD/sig	0.48	P≤0.01
EXTENSION (%)		
mean	6.01	6.26
std deviation	1.70	1.76
LSD/sig	0.21	P≤0.01
MICRONAIRE		
mean	4.14	3.90
std deviation	0.30	0.31
LSD/sig	0.11	P≤0.01

Hordeum vulgare
Barley

'Keel'

Application No: 1999/143 Accepted: 8 Jun 1999.
Applicant: **Luminis Pty Ltd,** Adelaide, SA and **Grains Research and Development Corporation,** Barton, ACT.

Characteristics (Table 24, Figure 40) Plant: semi-prostrate to semi-erect juvenile growth, medium-short stature. Lowest leaves: hairiness of leaf sheaths absent. Flag leaf: anthocyanin colouration of auricles absent, glaucosity of sheath medium – strong. Time of ear emergence: early. Ear: glaucosity medium, attitude semi-erect, number of rows two, length short. Rachis: length of first segment medium-weak, curvature of first segment weak. Sterile spikelet: attitude (in mid-third ear) parallel to weakly divergent. Median spikelet: length of glume and its awn relative to the grain long. Grain: rachilla hair type long, anthocyanin colouration of lemma weak, husk present, colour white, size large. Seasonal type: spring. Disease resistance: 'Keel' carries an unidentified gene (s) for resistance to cereal cyst nematode (CCN), different from that in 'Chebec' (*Ha2*) or 'Galleon' and 'Barque' (*Ha4*).

Origin and Breeding Controlled pollination: the original cross CPI18197/Clipper//WI2645 was made in University of Adelaide, Waite Campus, SA in 1988. The seed parents CPI18197 (maternal ½) is characterised by very tall plant height, 'Clipper' (maternal ½) is characterised by susceptibility to CCN and the pollen parent WI 2645 is characterised by large lateral spikelets. From this cross, a number of F_2 selections were made and propagated in rows as F_3 lines and then small yield plots in F_4. The number of sites and replication was increased and in 1994, one re-selection from the original F_2 derived population was designated "WI 2976" and passed to SARDI to enter Stage 3 yield trials. In 1995, WI 2976 was again tested in Stage 3 trials in the SARDI and University of Adelaide trial system. In 1996, 1997 and 1998 it was tested in the SARDI Stage 4 trials at 20 locations around SA. WI 2976 showed high yields especially in the more fertile soils and in seasons where its early maturity was an advantage. WI 2976 was later named as 'Keel' for commercial release. Selection criteria: yield in SA conditions, resistance to cereal cyst nematode; WI 2976 was tested for resistance to the cereal cyst nematode by SARDI in bioassays. Selection for resistance to spot form net blotch and leaf scald were key selection criteria. Propagation: by self-pollinated seed. Breeders: Dr DHB Sparrow, Dr. RCM Lance, Dr A R Barr, University of Adelaide, SA.

Choice of Comparators the following comparators were chosen on the basis of seasonal types – 'Chebec', 'Galleon', 'Barque'(Þ), 'Sloop'(Þ), 'Schooner' and 'Mundah'(Þ). These varieties are the most similar varieties grown in South Australia in the areas to which 'Keel' is adapted. In 1999, these varieties were sown on 13%, 8%, 11%, 23%, 37% and 3% of the area, respectively.

Comparative Trial Location: Turretfield Research Centre, Rosedale, SA in 1999. Condition: sown in June, 1999 in plots 8 rows by 5 metres, seeding rate was 60 kg/ha, corresponding to approximately 150 seeds per square metre. Hence, each replicate contains approximately 850 seeds. Trial design: randomised complete block. Measurements: qualitative traits (eg. maturity) were measured on a whole plot basis whereas quantitative traits were measured on 10 plants per plot (ear length, awn length) or 100 plants per plot (uniformity of height).

Prior Applications and Sales Nil.

Description: **Professor Andrew Barr,** Department of Plant Science, Waite Campus, University of Adelaide.

Table 24 *Hordeum* varieties

	'Keel'	'Chebec'	'Galleon'	'Barque'(Þ)	'Sloop'(Þ)	'Schooner'	'Mundah'(Þ)
PLANT GROWTH HABIT	intermediate	erect	prostrate	semi-prostrate	erect	erect	erect
FLAG LEAF: GLAUCOSITY OF SHEATH	medium-strong	weak	weak	medium	weak	medium	weak
TIME OF EAR EMERGENCE (first spikelet visible on 50% of ears)	Oct 1	Oct 5	Oct 5	Oct 4	Oct 5	Oct 5	Oct 4
EAR: GLAUCOSITY	medium	absent or very weak	absent or very weak	n/a	weak	weak	weak
EAR: ATTITUDE	semi-erect	erect	semi-erect	medium	semi-erect	semi-erect	semi-erect
PLANT: HEIGHT CLASS	short-medium	medium-tall	medium	tall	medium-tall	medium-tall	medium

Table 24 continued

EAR: SHAPE	tapering	tapering	parallel	tapering	parallel	tapering	parallel
EAR: LENGTH (excluding awns) (mm)							
mean	69	66	79	70	61	82	69
std deviation	3.8	4.5	9.8	7.4	5.9	6.4	6.6
LSD/sig	7.51	ns	P≤0.01	ns	P≤0.01	P≤0.01	ns
AWN: LENGTH (mm)							
mean	110	101	100	107	108	123	108
std deviation	6.3	5.0	5.7	5.8	6.3	3.8?	3.4
LSD/sig	6.8	P≤0.01	P≤0.01	ns	ns	P≤0.01	ns
RACHIS: CURVATURE OF FIRST SEGMENT	weak	n/a	weak	absent or very weak	absent or very weak	absent or very weak	very weak
STERILE SPIKELET: ATTITUDE (in mid-third ear)	parallel to weakly divergent	parallel to weakly divergent	parallel to divergent	parallel to divergent	parallel	parallel	parallel
GRAIN: RACHILLA HAIR TYPE	long	short	short	short	short	short	n/a
GRAIN: ANTHOCYANIN COLOURATION OF LEMMA	weak	medium	weak	absent or very weak	medium-strong	absent or very weak	very weak
RESISTANCE TO CEREAL CYST NEMATODE	resistant	resistant	resistant	resistant	susceptible	susceptible	susceptible
GENE FOR RESISTANCE TO CEREAL CYST NEMATODE	Unknown	*Ha2*	*Ha4*	*Ha4*	n/a	n/a	n/a
MATURITY CLASS	very early	early-mid	early-mid	early	early-mid	early-mid	early

Impatiens hybrid
New Guinea Hybrid Impatiens

'Kimps' syn **Samoa Pearl**

Application No: 1997/300 Accepted: 29 Jun 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 25, Figure 9) Plant: habit mounded, abundantly branching, continuously flowering, mean height 17cm. Leaf: mean length including petiole 109mm. Flower: single, mean diameter 62mm, mean height 64mm, main colour of upper side petal white (RHS 155D), secondary colour red-purple (RHS 57D) in eye zone and central distal portion of standard petal, eye zone small, flower bud red-purple. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent 'Kimoa' x pollen parent #IP222. The parents were characterised by smaller flowers and less vigorous growth and habit. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: large flower size and vigorous growth with strong basal branching. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kimps' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kimoa', 'Innocence'(Φ), 'Kimoo', 'Celebration Pure White'(Φ), 'Jasius' and 'Sphinx' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Jasius' and 'Sphinx' were excluded from the trial due to smaller flower size and absence of leaf markings. 'Innocence'(Φ) was excluded due to its different flower shape and lack of secondary flower colour. 'Kimoo' and 'Celebration Pure White'(Φ) were finally chosen due to similarities in flower colour, size and shape. The parents were not considered for the trial because 'Kimps' is clearly distinguishable from the seed parent by its variegated leaves and from the pollen parent by flower size.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial

design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Germany	1993	Granted	'Kimps'
Denmark	1994	Surrendered	'Kimps'
UK	1994	Surrendered	'Kimps'
Italy	1994	Applied	'Kimps'
Japan	1994	Granted	'Kimps'
Sweden	1994	Surrendered	'Kimps'
USA	1994	Granted	'Improved Samoa'
EU	1995	Granted	'Kimps'
South Africa	1995	Granted	'Kimps
The Netherlands	1995	Surrendered	'Kimps'
Poland	1998	Granted	'Kimps'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kimoo' syn Moorea

Application No: 1997/301 Accepted: 29 Jun 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 25, Figure 9) Plant: habit mounded, abundantly branching, continuously flowering, mean height 19cm. Leaf: mean length including petiole 129mm. Flower: single, mean diameter 62mm, mean height 63mm, main colour of upper side petal white (RHS 155D), secondary colour absent. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #WW282 x pollen parent #IW913. The parents were characterised by smaller flowers and less desirable foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: large flower size and vigorous growth with strong basal branching. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kimoo' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kimoa', 'Celebration Pure White'(þ), 'Jasius' and 'Sphinx' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Jasius' and 'Sphinx' were excluded from the trial due to smaller flower size. 'Kimoa' was excluded due to its secondary leaf colour. 'Celebration Pure White'(þ) was finally chosen due to similarities in flower colour, size and shape. The parents were not considered for the trial because of the differences as stated above.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Germany	1993	Granted	'Kimoo'
Denmark	1994	Surrendered	'Kimoo'
UK	1994	Surrendered	'Kimoo'
Italy	1994	Applied	'Kimoo'
Japan	1995	Granted	'Kimoo'
Sweden	1994	Surrendered	'Kimoo'
USA	1994	Granted	'Moorea'
EU	1995	Granted	'Kimoo'
South Africa	1995	Granted	'Kimoo
The Netherlands	1995	Surrendered	'Kimoo'
Poland	1998	Granted	'Kimoo'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 25 *Impatiens* varieties

	'Kimps'	'Kimoo'	*'Celebration Pure White'(þ)
PLANT WIDTH (mm) LSD (P≤0.01) = 3.5 – widest cross-section			
mean	25.7[b]	35.8[a]	34.4[a]
std deviation	3.3	3.6	1.9
LEAF WIDTH (mm) LSD (P≤0.01) = 5.2 – widest cross-section			
mean	36.1[b]	42.1[a]	33.2[b]
std deviation	3.4	5.3	4.8
LEAF BLADE SHAPE	ovate	ovate	elliptic
UPPER SIDE OF LEAF BLADE			
ground colour	dark green	medium green	medium green
marking	present	absent	absent
size of marking	small	–	–
colour of marking	yellow	–	–
colour of midrib	red	green	green
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)			
number of colours	two	one	two
main colour	155D	155D	155D
secondary colour	57D	–	57D (faint marginal blush)
eye zone	present	absent	present
eye zone size	medium	–	small
eye zone colour	57D	–	57D
petal incisions	medium	medium	shallow

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

'Kigula' syn **Tagula**

Application No: 1999/101 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 26, Figure 10) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: shape ovate, upper side ground colour dark green, upper side marking absent. Flower: single, mean height 59mm, main colour of upper side petal red (RHS 55C-D), secondary colour red (RHS 40A), eye zone size medium, colour red-purple (RHS 66A-B), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #Z871 x pollen parent #Z661. The parents were proprietary seedlings characterised by large flowers, spreading, mounded vigorous growth habit and non variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: superior red/pink bicolour variety to match Kientzler range. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kigula' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kilyc', 'Kinep', 'Ambience'(Φ) and 'Vulcain'(Φ) were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Vulcain'(Φ) was excluded from the trial due to its leaf markings. 'Kilyc', 'Kinep' and 'Ambience'(Φ) were finally chosen due to similarities in flower colour.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1997	Granted	'Kigula'
USA	1997	Granted	'Tagula'
Japan	1997	Applied	'Kigula'
Poland	1998	Applied	'Kigula'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kilyc' syn **Lycia**

Application No: 1999/091 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 26, Figure 10) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: shape ovate, upper side ground colour medium-dark green, upper side marking absent. Flower: single, mean height 61mm, main colour of upper side petal red (RHS 50D), secondary colour brighter than red (RHS 40A), eye zone size small, colour red-purple (RHS 57A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #L34 x pollen parent #P905. The parents were proprietary seedlings characterised by large, flat flowers, spreading, mounded growth habit and dark green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: superior orange/white bicolour variety to match Kientzler range. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kilyc' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kinep', 'Kigula', 'Ambience'(Φ) and 'Vulcain'(Φ) were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Vulcain'(Φ) was excluded from the trial due to its leaf markings. 'Kinep', 'Kigula' and 'Ambience'(Φ) were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1997	Applied	'Kilyc'
USA	1997	Granted	'Lycia'
Japan	1997	Applied	'Kilyc'
Poland	1998	Applied	'Kilyc'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kinep' syn **Neptis**

Application No: 1999/094 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 26, Figure 10) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: shape ovate, upper side ground colour medium-dark green, upper side marking absent. Flower: single, mean height 55mm, main colour of upper side petal red-purple (RHS 62A), secondary colour red (RHS 45-46B), eye zone size small, colour red-purple (RHS 57A-B), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #Z661 x pollen parent #N213. The parents were proprietary seedlings characterised by large round flowers, spreading, mounded vigorous growth habit and medium green, non variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: superior red/pink bicolour variety to match Kientzler range. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kinep' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kilyc', 'Kigula', 'Ambience'(ф), 'Celebration Cherry Star' and 'Vulcain'(ф) were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Celebration Cherry Star' was excluded from the trial due to its differing flower colour combination and taller growth habit. 'Vulcain'(ф) was excluded from the trial due to its leaf markings. 'Kilyc', 'Kigula' and 'Ambience'(ф) were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1997	Granted	'Neptis'
Japan	1997	Applied	'Kinep'
Poland	1998	Applied	'Kinep'
EU	1998	Granted	'Kinep'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 26 *Impatiens* varieties

	'Kilyc'	'Kinep'	'Kigula'	*'Ambience'(ф)
PLANT HEIGHT (cm) LSD (P≤0.01) = 1.9				
– maximum				
mean	16.6 b	20.7 a	15.9 b	21.0 a
std deviation	1.0	1.3	1.7	1.8
PLANT WIDTH (cm) LSD (P≤0.01) = 5.5				
– maximum				
mean	26.9 bc	34.2 ab	24.6 c	37.2 a
std deviation	2.5	2.9	4.8	5.6
LEAF LENGTH (mm) LSD (P≤0.01) = 13.3				
– including petiole on largest, fully expanded leaf below first flower on stem				
mean	105 b	136 a	107 b	106 b
std deviation	10.0	13.9	10.9	11.4
LEAF WIDTH (mm) LSD (P≤0.01) = 5.2				
– widest cross-section on largest, fully expanded leaf below first flower on stem				
mean	38.1 b	46.8 a	38.3 b	33.8 b
std deviation	4.5	4.8	3.8	5.2
FLOWER DIAMETER (mm) LSD (P≤0.01) = 5.5				
– widest cross-section wing to wing				
mean	60.7 a	54.9 ab	58.3 ab	51.9 b
std deviation	5.3	3.6	6.0	4.0
LOWER SIDE OF LEAF BLADE GROUND COLOUR	green	red	red	red
FLOWER: APEX OF STANDARD PETAL	apiculate	retuse	retuse	apiculate
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)				
main colour	50D	62A	55C-D	62A-B
secondary colour	brighter than 40A	45-46B	40A	44A-B
eye zone colour	57A	57A-B	66A-B	67A
FLOWER: POSITION OF SECONDARY COLOUR				
standard petal	wide band	wide band	wide band	wide band
wing petals	central margin	medium band	central margin	medium band
keel petals	narrow band	medium band	narrow band	wide band

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

'Kimptol' syn **Tolinga**

Application No: 2000/058 Accepted: 21 March 2000.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 27, Figure 11) Plant: habit mounded, abundantly branching, continuously flowering, mean width 19cm. Leaf: marking of upper side absent. Flower: single, main colour of upper side petal deeper than red-purple (RHS 57A), secondary colour absent, eye zone

size small, colour red (RHS 45A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent 'Kitol' x pollen parent #B223. The seed parent was characterised by less luminous flowers positioned more within the foliage and with less growth vigour. The pollen parent was characterised by lighter foliage and greater growth vigour. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: vigorous growth and good flower characters compared to 'Kitol'. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kimptol' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kipas', 'Sarchi', 'Aruba' and 'Bora Bora' were initially considered for the comparative trial, as these are similar varieties of common knowledge. 'Aruba' was excluded from the trial due to deeper purple flower colour and more cupped flower form. 'Bora Bora' was excluded from the trial due to deeper purple flower colour and white eye zone. 'Kipas' and 'Sarchi' were finally chosen due to similarities in flower colour. The parents were not considered for the trial because of their differences as stated above.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Japan	1997	Applied	'Kimptol'
Canada	1998	Granted	'Kimptol'
EU	1999	Applied	'Kimptol'

First sold in Germany in Jan 1997. First Australian sale Feb 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kipas' syn Pascua

Application No: 1999/097 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 27, Figure 11) Plant: habit mounded, abundantly branching, continuously flowering, mean width 25cm. Leaf: marking of upper side absent. Flower: single, main colour of upper side petal red-purple (RHS 74A), secondary colour absent, eye zone size medium, colour red-purple (RHS 57A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #P242 x pollen parent #L787. The parents were characterised by smaller flowers and plant size and less desirable foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: large flower size and vigorous growth with strong basal branching and good flower keeping quality. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kipas' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kimptol', 'Sarchi', 'Aruba' and 'Bora Bora' were initially considered for the comparative trial, as these are similar varieties of common knowledge. 'Aruba' was excluded from the trial due to deeper purple flower colour and more cupped flower form. 'Bora Bora' was excluded from the trial due to deeper purple flower colour and white eye zone. 'Kimptol' and 'Sarchi' were finally chosen due to similarities in flower colour. The parents were not considered for the trial because of their differences as stated above.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1997	Granted	'Kipas'
Japan	1997	Applied	'Kipas'
Poland	1998	Applied	'Kipas'
EU	1998	Granted	'Kipas'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 27 *Impatiens* varieties

	'Kipas'	'Kimptol'	*'Sarchi'
PLANT HEIGHT (cm) LSD (P≤0.01) = 2.7 – maximum			
mean	18.2 a	13.5 b	15.6 ab
std deviation	1.9	2.6	1.0
LEAF LENGTH (mm) LSD (P≤0.01) = 10.1 – including petiole on largest, fully expanded leaf below first flower on stem			
mean	117.2 a	71.3 c	94.5 b
std deviation	8.1	9.8	8.6

LEAF WIDTH (mm) LSD (P≤0.01) = 3.2			
– widest cross-section on largest, fully expanded leaf below first flower on stem			
mean	30.9 [a]	23.6 [b]	27.8 [a]
std deviation	3.4	2.9	1.9
LEAF BLADE SHAPE			
	elliptic	ovate	elliptic
LOWER SIDE OF LEAF BLADE GROUND COLOUR			
	red	red	green
FLOWER DIAMETER (mm) LSD (P≤0.01) = 3.4			
– widest cross-section wing to wing			
mean	51.4 [a]	36.7 [b]	40.4 [b]
std deviation	3.8	2.9	1.9
FLOWER HEIGHT (mm) LSD (P≤0.01) = 3.7			
– widest cross-section standard to keel			
mean	56.9 [a]	41.0 [b]	43.7 [b]
std deviation	3.4	4.0	1.9
FLOWER: APEX OF STANDARD PETAL			
margin	retuse	apiculate	apiculate
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)			
main colour	74A	deeper than 57A	74A
eye zone size	medium	small	small
eye zone colour	57A	45A	66A

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

'Kallima'

Application No: 1999/096 Accepted: 24 June 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 12) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red (RHS 55A), secondary colour absent, eye zone size small, colour red-purple (RHS 60A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #R34 x pollen parent #P556. The parents were proprietary seedlings characterised by large flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1993 and first flowers were observed on the new variety in 1994. Selection criteria: pink flower colour, dark green foliage, growth vigour. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kallima' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kimpgua', 'Celebration Deep Pink', 'Kiwoya' 'Illusion', 'Sesia', 'Melissa' and 'Tobago' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Sesia' was excluded from the trial due to presence of leaf markings. 'Melissa' was excluded from the trial due its deeper, more reddish pink flower colour with a more purple eye zone. 'Tobago' was excluded from the trial due to its more reddish pink flower colour with a more distinct eye zone and lighter green foliage. 'Illusion' was excluded from the trial due to its lighter pink flower colour. 'Celebration Deep Pink', 'Kiwoya' and 'Kimpgua' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1994	Granted	'Kallima'
EU	1995	Granted	'Kallima'
Japan	1995	Granted	'Kallima'
Germany	1993	Granted	'Kallima'
Denmark	1997	Surrendered	'Kallima'
UK	1993	Surrendered	'Kallima'
Italy	1994	Applied	'Kallima'
Netherlands	1993	Surrendered	'Kallima'
Sweden	1994	Terminated	'Kallima'

First sold in Germany in Jan 1996. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kimpgua'

Application No: 1999/100 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 13) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red-purple (RHS 72C) secondary colour red-purple (RHS 66A), eye zone size medium, colour red (RHS 53A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #N213 x pollen parent 'Kigua'. The seed parent is a proprietary seedling characterised by large flowers, vigorous growth habit and medium green, non-variegated foliage. The pollen parent 'Kigua' is a less vigorous growing red-purple variety. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: strong growth vigour and purple and pink bicolour flowers. Propagation: mature stock plants were generated from this

seedling through tissue culture and were found to be uniform and stable. 'Kimpgua' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Shadow', 'Celebration Purple Star', 'Vulcain' and 'Octavia' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Octavia' and 'Vulcain' were excluded from the trial due to their more purple main flower colour and presence of leaf variegation. 'Shadow' and 'Celebration Purple Star' were finally chosen due to similarities in flower colour and foliage. The pollen parent 'Kigua' was excluded from the trial due to its more violet flower colour, star-shaped, slightly cupped flower profile, less branched, less spreading and less vigorous growth habit.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Kimpgua'
Canada	1998	Granted	'Kimpgua'
Japan	1997	Applied	'Kimpgua'
Poland	1998	Granted	'Kimpgua'
USA	1997	Granted	'Kimpgua'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kipag' syn **Pago Pago**

Application No: 1997/302 Accepted: 29 June 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 12) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red-purple (RHS 62B) secondary colour red (RHS 53D), eye zone size medium, colour red-purple (RHS 57A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #BC212 x pollen parent #VC817. The parents were proprietary seedlings characterised by large bicolour flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: strong bicolour flowers, earliness and growth vigour. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kipag' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kiwoya', 'Kispix', 'Kitoga', 'Celebration Candy Pink', 'Flambe', 'Rosetta', 'Ambience', 'Tempest', 'Tahiti' and 'Fiji' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Flambe', 'Tahiti' and 'Fiji' were excluded from the trial due to differing leaf ground colours and 'Tempest' due to presence of leaf markings. 'Rosetta' was excluded from the trial due to its different flower colour pattern. 'Ambience' was excluded from the trial due to its different redder, more bicolour flower colour pattern. 'Kiwoya', 'Kispix', 'Kitoga' and 'Celebration Candy Pink' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Denmark	1994	Surrendered	'Kipag'
EU	1995	Granted	'Kipag'
Germany	1994	Granted	'Kipag'
Italy	1994	Applied	'Kipag'
Japan	1995	Granted	'Kipag'
Netherlands	1993	Surrendered	'Kipag'
Poland	1997	Granted	'Kipag'
South Africa	1995	Granted	'Kipag'
Sweden	1994	Terminated	'Kipag'
UK	1994	Surrendered	'Kipag'
USA	1994	Granted	'Pago Pago'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kitoga' syn **Toga**

Application No: 1999/098 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 13) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal purple (RHS 78C-D) secondary colour absent, eye zone size small, colour white (RHS 155D), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #W525 x pollen parent #L926. The parents were proprietary seedlings characterised by large flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: lavender flower colour, growth habit. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kitoga' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kiwoya', 'Celebration Candy Pink', 'Celebration Purple Star', 'Tonga', 'Saturnia', 'Heathermist', 'Octavia' and 'Bora Bora' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Octavia' was excluded from the trial due to presence of leaf markings. 'Heathermist' and Bora Bora' were excluded due to their deeper purple flower colour and darker leaves. 'Tonga' and 'Saturnia', were excluded from the trial due to a combination of lighter flower colour and red ground colour of leaf underside. 'Celebration Purple Star' was excluded due to its distinctive bicolour flower markings. 'Celebration Candy Pink' 'and 'Kiwoya' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1997	Granted	'Toga'
Japan	1997	Applied	'Kitoga'
Poland	1998	Granted	'Kitoga'
EU	1998	Granted	'Kitoga'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kispix' syn **Spixis**

Application No: 1999/093 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 13) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red-purple (RHS 74C) secondary colour red-purple (RHS 57B), eye zone size medium, colour red-purple (RHS 57B), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #I901 x pollen parent #B55. The parents were proprietary seedlings characterised by large bicolour flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: strong bicolour flowers. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kispix' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kipag', 'Celebration Candy Pink', 'Celebration Purple Star' and 'Octavia' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Octavia' was excluded from the trial due to its more purple flower colour and presence of some leaf variegation. 'Kipag', 'Celebration Candy Pink' and 'Celebration Purple Star' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Kispix'
Japan	1997	Applied	'Kispix'
Poland	1998	Granted	'Kispix'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kiwoya' syn **Woya**

Application No: 1999/099 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 28, Figure 12) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red-purple (RHS 62A) with white 155D along margins, secondary colour red-purple (RHS 66A) blush on standard petal with white (RHS 155D) spot at base, eye zone size small, colour red-purple (RHS 66A) flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #W892 x pollen parent #P496. The parents were proprietary seedlings characterised by large pink and white flowers respectively, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: light pink flower colour, earliness and profuse flowering. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kiwoya' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kipag', 'Kispix', 'Kitoga', 'Celebration Candy Pink', 'Flambe', 'Rosetta', 'Ambience', 'Tempest', 'Tahiti' and 'Fiji' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Flambe', 'Tahiti' and 'Fiji' were excluded from the trial due to differing leaf ground colours and 'Tempest' due to presence of leaf markings. 'Rosetta' and 'Kispix' were excluded from the trial due to their different flower colour pattern. 'Ambience' was excluded from the trial due to its different redder, more bicolour flower colour pattern. 'Kipag', 'Kitoga' and 'Celebration Candy Pink' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Kiwoya'
Japan	1997	Applied	'Kiwoya'
Poland	1998	Granted	'Kiwoya'
USA	1997	Granted	'Woya'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 28 *Impatiens* varieties

	'Kipag'	'Kispix'	'Kallima'	'Kitoga'	'Kiwoya'	'Kimpgua'	*'Shadow'	*'Celebration Purple Star'	*'Celebration Candy Pink'	*'Celebration Deep Pink'
PLANT HEIGHT (cm) LSD (P≤0.01) = 3.1										
– maximum										
mean	22.5 bcd	18.1 d	21.1 cd	18.3 d	16.8 d	21.7 bcd	25.1 abc	29.2 a	27.3 ab	24.4 abc
std deviation	4.6	3.1	1.4	1.6	1.5	1.9	3.0	2.3	3.3	1.8
PLANT WIDTH (cm) LSD (P≤0.01) = 5.1										
– maximum										
mean	32.1 cd	28.5 d	40.8 abc	33.5 bcd	28.0 d	38.1 abc	37.7 abc	46.4 a	42.7 ab	42.6 ab
std deviation	4.8	3.4	2.5	2.2	3.8	3.5	7.5	4.0	5.0	3.6
LEAF LENGTH (mm) LSD (P≤0.01) = 18.0										
– including petiole on largest, fully expanded leaf below first flower on stem										
mean	106 c	113 bc	131 ab	125 abc	86 d	135 ab	128 abc	120 abc	140 a	133 ab
std deviation	11.9	13.8	11.7	14.6	11.8	14.2	21.3	18.5	18.2	18.1
LEAF WIDTH (mm) LSD (P≤0.01) = 5.5										
– widest cross-section on largest, fully expanded leaf below first flower on stem										
mean	31.4 b	37.8 ab	35.4 ab	39.0 a	30.8 b	39.4 a	40.8 a	37.6 ab	39.6 a	37.0 ab
std deviation	5.1	4.4	4.0	3.5	4.5	3.1	7.2	3.0	6.8	4.3
LEAF SHAPE										
– measured leaf										
	elliptic	ovate	elliptic	ovate	elliptic	elliptic	elliptic	ovate	ovate	elliptic
LOWER SIDE OF LEAF BLADE GROUND COLOUR										
	red	red	red	green	red	red	red	red	red	red
FLOWER DIAMETER (mm) LSD (P≤0.01) = 4.5										
– widest cross-section wing to wing										
mean	53.8 abcd	54.8 abcd	55.2 abcd	56.8 abc	49.3 d	53.8 abcd	59.6 a	52.7 bcd	59.1 ab	51.5 cd
std deviation	4.4	5.3	3.5	3.1	3.8	2.6	5.9	2.5	4.3	2.5
FLOWER HEIGHT (mm) LSD (P≤0.01) = 4.6										
– widest cross-section standard to keel										
mean	53.5 c	56.8 abc	60.6 ab	62.9 a	52.7 c	55.1 bc	61.9 a	52.5 c	60.2 ab	51.9 c
std deviation	2.9	5.2	2.1	4.7	4.3	3.3	5.4	2.4	5.0	3.8

FLOWER: APEX OF STANDARD PETAL	apiculate	apiculate	apiculate to retuse	retuse to emarginate	retuse	apiculate	retuse	retuse to emarginate	apiculate	retuse
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)										
main colour	62B	74C	55A	78C-D	62A with 155D at margins	72C	74A	74C-D	75B	55A
secondary colour	53D	57B	–	–	66A blush on standard petal 155D at base of standard petal	66A	brighter than 57A, also 43B	74A	53C-D	–
eye zone colour	57A	57B	60A	155D	66A	53A	57A, brighter	57A-B	74A	57A
FLOWER: POSITION OF SECONDARY COLOUR										
standard petal	wide band	very wide	–	–	faint wide band	medium band	wide band	wide band	medium blush	–
wing petals	–	narrow band	–	–	–	–	narrow band	narrow band	narrow band	–
keel petals	–	medium band	–	–	–	–	narrow band	narrow band	narrow band	–

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

'Kiala' syn **Moala**

Application No: 1999/102 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 14) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red (RHS 45A-B), secondary colour absent, eye zone size small, colour red (RHS 45A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #R353 x pollen parent #DR261. The parents were proprietary seedlings characterised by large red flowers, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: well branched, compact, red flower colour and large rounded flowers. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kiala' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Prep', 'Celebration Deep Red', 'Kirawa', 'Kimpque', 'Anaea', 'Selenia' and 'Lanai' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to a more orange flower colour and 'Lanai' was excluded from the trial due to its lighter red flower colour. 'Anaea' was excluded from the trial due to a more lobed flower with no eye zone and a less compact growth habit. 'Prep', 'Celebration Deep Red', 'Kirawa' and 'Kimpque' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Kiala'
USA	1997	Granted	'Moala'
Japan	1997	Appiled	'Kiala'
Poland	1998	Granted	'Kiala'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kimpque' syn **Quepos**

Application No: 2000/057 Accepted: 21 March 2000.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 15) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side

petal red (RHS 43A), secondary colour absent, eye zone size small, colour red-purple (RHS 74A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent 'Kique' x pollen parent #B882. The seed parent has a less luminous orange-red flower colour with shorter leaves and less vigorous growth. The pollen parent was a proprietary seedling characterised by orange flowers and a vigorous growth habit. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: flower colour, growth vigour. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kimpque' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kitim', 'Kixant', 'Kirawa', 'Celebration Orange Bonfire', 'Ambrosia', 'Selenia', 'Prep', 'Celebration Deep Red', 'Kiala' and 'Antigua' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to a more orange flower colour, absence of an eye zone and larger, rounder flowers. 'Antigua' was excluded from the trial due to its less intense orange-red flower colour and lighter green foliage. 'Prep', 'Celebration Deep Red' and 'Kiala' were excluded from the trial due to a redder flower colour. 'Kitim', 'Celebration Orange Bonfire', 'Kixant', 'Kirawa' and 'Ambrosia' were finally chosen due to similarities in flower colour and foliage. The seed parent was not considered for the trial because it has a more orange flower colour, differing foliage and less growth.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Canada	1998	Granted	'Kimpque'
EU	1996	Granted	'Kimpque'
Japan	1997	Applied	'Kimpque'
USA	1998	Granted	'Kimpque'

First sold in Germany in Jan 1997. First Australian sale Feb 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kirawa' syn **Tarawa**

Application No: 1999/103 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 14) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal brighter than red (RHS 43A), secondary colour absent, eye zone size small, colour red-purple (RHS 74A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #O419 x pollen parent #R556. The parents were proprietary seedlings characterised by large orange and red flowers respectively, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: orange flower colour, dark foliage and luminous flowers. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kirawa' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kitim', 'Kixant', 'Kimpque', 'Celebration Orange Bonfire', 'Ambrosia', 'Selenia', 'Prep', 'Celebration Deep Red', 'Kiala' and 'Antigua' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to a more orange flower colour, absence of an eye zone and larger, rounder flowers. 'Antigua' was excluded from the trial due to its less intense orange-red flower colour and lighter green foliage. 'Prep', 'Celebration Deep Red' and 'Kiala' were excluded from the trial due to a redder flower colour. 'Kitim', 'Celebration Orange Bonfire', 'Kixant', 'Kimpque' and 'Ambrosia' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Applied	'Kirawa'
Japan	1997	Applied	'Kirawa'
Poland	1998	Granted	'Kirawa'
USA	1997	Granted	'Tarawa'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kitim' syn **Timor**

Application No: 1997/303 Accepted: 29 June 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 15) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal brighter than red (RHS 40A), secondary colour absent, eye zone size medium, colour red (RHS 45B), flower bud red and green. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent 'Selenia' x pollen parent #ZF380. The seed parent has a more orange flower colour with no eye zone and the pollen parent was a proprietary seedling characterised by large flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: red flower colour and earliness. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kitim' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kixant', 'Celebration Orange Bonfire', 'Kirawa', 'Kimpque', 'Ambrosia', 'Antigua', 'Barbados', 'Selenia' and 'Lanai' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to a more orange flower colour and 'Lanai' was excluded from the trial due its deeper red flower colour. 'Antigua' was excluded from the trial due to a larger flower size with red-purple eye zone colour and 'Barbados' was excluded from the trial due its differing foliage. 'Kixant', 'Celebration Orange Bonfire', 'Kirawa', 'Kimpque' and 'Ambrosia' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Denmark	1994	Surrendered	'Kitim'
EU	1995	Granted	'Kitim'
Germany	1994	Granted	'Kitim'
Italy	1994	Applied	'Kitimor'
Japan	1995	Granted	'Kitim'
Netherlands	1993	Surrendered	'Kitim'
Poland	1997	Granted	'Kitim'
South Africa	1995	Granted	'Kitim'
Sweden	1994	Terminated	'Kitim'
UK	1994	Surrendered	'Kitim'
USA	1994	Granted	'Kitim'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kixant' syn **Xanthia**

Application No: 1999/095 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 15) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal brighter than red (RHS 40A), secondary colour absent, eye zone size medium, colour red-purple (RHS 67A-B), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #O67 x pollen parent #O452. The parents were proprietary seedlings characterised by large orange flowers, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: orange flower colour and large flower size. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kixant' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kitim', 'Celebration Orange Bonfire', 'Kirawa', 'Kimpque', 'Ambrosia', 'Antigua', 'Barbados', 'Selenia' and 'Epia' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to the absence of an eye zone and 'Epia' was excluded from the trial due its more orange flower colour and red leaf underside ground colour. 'Antigua' was excluded from the trial due to a larger flower size with red-purple eye zone colour and 'Barbados' was excluded from the trial due its differing foliage. 'Kitim', 'Celebration Orange Bonfire', 'Kirawa', 'Kimpque' and 'Ambrosia' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Applied	'Kixant'
Japan	1997	Applied	'Kixant'
Poland	1998	Applied	'Kixant'
USA	1997	Granted	'Xanthia'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Prep' syn **Prepona**

Application No: 1997/298 Accepted: 29 June 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 29, Figure 14) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red (RHS 45B), secondary colour absent, eye zone size small, colour red (RHS 45A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #RB018 x pollen parent #A302. The parents were proprietary seedlings characterised by large flowers, vigorous growth habit and medium green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: red flower colour, large flower size, earliness. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Prep' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kiala', 'Celebration Deep Red', 'Kirawa', 'Kimpque', 'Selenia' and 'Lanai' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Selenia' was excluded from the trial due to a more orange flower colour and 'Lanai' was excluded from the trial due to its lighter red flower colour. 'Kiala', 'Celebration Deep Red', 'Kirawa' and 'Kimpque' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Denmark	1994	Granted	'Prep'
EU	1995	Granted	'Prep'
Germany	1993	Granted	'Prep'
Italy	1994	Applied	'Prep'
Japan	1994	Granted	'Prepona'
Netherlands	1993	Surrendered	'Prep'
Sweden	1995	Terminated	'Prep'
UK	1994	Surrendered	'Prep'
USA	1994	Granted	'Prep'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 29 *Impatiens* varieties

	'Prep'	'Kitim'	'Kixant'	'Kiala'	'Kirawa'	'Kimpque'	*'Celebration Deep Red'	*'Celebration Orange Bonfire'	*'Ambrosia'
PLANT HEIGHT (cm) LSD (P≤0.01) = 2.4									
– maximum									
mean	19.5 c	20.3 c	15.9 d	19.7 cd	22.1 bc	14.2 d	22.7 bc	26.7 a	25.1 ab
std deviation	1.2	1.3	1.1	1.5	2.8	1.9	1.5	1.7	1.2
PLANT WIDTH (cm) LSD (P≤0.01) = 4.8									
– maximum									
mean	33.5 bc	30.1 c	32.4 bc	38.1 abc	34.9 abc	23.0 d	40.3 ab	42.7 a	34.7 abc
std deviation	3.3	5.0	2.8	2.2	3.1	2.4	3.0	3.1	3.8
LEAF LENGTH (mm) LSD (P≤0.01) = 14.6									
– including petiole on largest, fully expanded leaf below first flower on stem									
mean	110.5 cd	100.2 cd	131.7 ab	130.7 ab	134.0 ab	93.0 d	140.4 a	100.1 cd	115.9 bc
std deviation	16.5	13.7	13.0	14.1	5.3	13.7	16.1	11.5	6.8
LEAF WIDTH (mm) LSD (P≤0.01) = 4.4									
– widest cross-section on largest, fully expanded leaf below first flower on stem									
mean	32.9 ab	29.3 b	33.4 ab	35.6 a	34.8 ab	19.2 c	37.7 a	38.6 a	34.0 ab
std deviation	4.9	5.0	3.9	3.5	2.8	1.9	3.8	4.8	2.4

LEAF SHAPE									
– measured leaf									
	elliptic	elliptic	elliptic	elliptic	elliptic	elliptic	elliptic	ovate	elliptic
LOWER SIDE OF LEAF BLADE GROUND COLOUR									
	green	green	green	green	red	green	green	red	red
FLOWER DIAMETER (mm) LSD (P≤0.01) = 4.7									
– widest cross-section wing to wing									
mean	60.4 a	54.3 bc	62.1 a	59.3 ab	61.2 a	42.9 e	54.5 bc	47.2 de	50.4 cd
std deviation	5.2	3.8	4.8	4.1	5.9	4.1	2.0	3.3	2.2
FLOWER HEIGHT (mm) LSD (P≤0.01) = 4.0									
– widest cross-section standard to keel									
mean	58.5 ab	55.4 bc	62.3 a	60.0 ab	61.3 a	43.7 d	52.2 c	50.5 c	52.3 c
std deviation	4.3	2.9	5.2	3.3	3.7	2.2	3.5	2.5	2.7
FLOWER: APEX OF STANDARD PETAL									
	apiculate	retuse	apiculate	apiculate	apiculate	apiculate	apiculate	apiculate	apiculate
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)									
main colour	45B	brighter than 40A	brighter than 40A	45A-B	brighter than 43A	43A	brighter than 45B	brighter than 40A	brighter than 40A
eye zone colour	45A	45B	67A-B	45A	74A	74A	45A	58A	63A-B

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

'Kibon' syn **Bonaire**

Application No: 1997/297 Accepted: 29 June 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 30, Figure 16) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red to red-purple (RHS 55A-58D), secondary colour absent, eye zone size small, colour red (RHS 53A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #ZI242 x pollen parent #BR930. The parents were proprietary seedlings characterised by large red flowers, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: flower colour and earliness. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kibon' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kigre', 'Kilor', 'Nicoya', 'Shadow' and 'Celerio' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Shadow' and 'Celerio' were excluded from the trial due to distinctive bicolour flower patterns. 'Kigre', 'Kilor' and 'Nicoya' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
The Netherlands	1993	Surrendered	'Kibon'
USA	1994	Granted	'Bonaire'
Germany	1994	Granted	'Kibon'
Japan	1994	Granted	'Kibonair'
EU	1995	Granted	'Kibon'
Denmark	1994	Surrendered	'Kibon'
UK	1994	Surrendered	'Kibon'
Italy	1994	Applied	'Kibon'
Poland	1997	Granted	'Kibon'
Sweden	1994	Terminated	'Kibon'
South Africa	1995	Granted	'Kibon'

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kilor' syn **Loros**

Application No: 2000/056 Accepted: 21 March 2000.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 30, Figure 16) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red (RHS 52B), secondary colour absent, eye zone size small, colour red (RHS 66A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent 'Kinic' (syn Nicoya) x pollen parent #B859. The seed parent is characterised by light pink flowers and compact growth habit. The pollen parent is a proprietary seedling characterised by orange flowers and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: flower colour, compact growth habit. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kilor' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kibon', 'Kigre', 'Nicoya' (seed parent) and 'Tobago' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Tobago' was excluded due to its larger, less compact growth habit. 'Kibon', 'Kigre' and 'Nicoya' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
EU	1996	Granted	'Kilor'
Japan	1997	Applied	'Kilor'

First sold in Germany in Jan 1997. First Australian sale Feb 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kinoc' syn **Noctua**

Application No: 1999/092 Accepted: 23 April 1999.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 30, Figure 16) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal deeper than red-purple (RHS 57A), secondary colour absent, eye zone size small, colour red-purple (RHS 66A), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #K523 x pollen parent #P229. The parents were proprietary seedlings characterised by large flowers, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1994 and first flowers were observed on the new variety in 1995. Selection criteria: flower colour and floriferousness. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kinoc' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Rose Celebration', 'Kicah', 'Papete', 'Kidom' and 'Martinique' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Kicah' was excluded due to its light orange flower colour. 'Papete' was excluded due to its purpler flower colour. 'Kidom' was excluded due to its less reddish-fuchsia flower colour and taller, more open growth habit. 'Martinique' was excluded due to its less purple flower colour and taller, more open growth habit. 'Rose Celebration' was finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Canada	1998	Granted	'Kinoc'
EU	1996	Granted	'Kinoc'
Japan	1997	Applied	'Kinoc'
Poland	1998	Granted	'Kinoc'
USA	1997	Granted	'Kinoc'

First sold in Germany in Jan 1997. First Australian sale Jan 1999.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

'Kigre' syn **Grenada**

Application No: 1997/299 Accepted: 29 June 1998.
Applicant: **InnovaPlant GmbH & Co. KG,** Gensingen, Germany.
Agent: **Protected Plant Promotions Australia Pty Ltd,** Macquarie Fields, NSW.

Characteristics (Table 30, Figure 16) Plant: habit mounded, abundantly branching, continuously flowering. Leaf: upper side ground colour dark green, upper side marking absent. Flower: single, main colour of upper side petal red (RHS 52C), secondary colour absent, eye zone size medium, colour red-purple (RHS 57A) to purple-violet

(RHS 80B), flower bud red. (Note: all RHS colour chart numbers refer to 1995 edition).

Origin and Breeding Controlled pollination: seed parent #QT435 x pollen parent #BD22. The parents were proprietary seedlings characterised by large flowers, vigorous growth habit and green, non-variegated foliage. Hybridisation took place in Gensingen, Germany in 1992 and first flowers were observed on the new variety in 1993. Selection criteria: flower colour and earliness. Propagation: mature stock plants were generated from this seedling through tissue culture and were found to be uniform and stable. 'Kigre' will be commercially propagated by vegetative cuttings from elite stock plants from disease indexed tissue cultures. Breeder: Ludwig Kientzler, Gensingen, Germany.

Choice of Comparators 'Kibon', 'Kilor', 'Nicoya', 'Illusion', 'Celsia', 'Celebration Candy Pink', 'Tobago', 'Shadow' and 'Celerio' were initially considered for the comparative trial as these are similar varieties of common knowledge. 'Shadow' and 'Celerio' were excluded from the trial due to distinctive bicolour flower patterns. 'Celsia' and 'Celebration Candy Pink' were excluded due to a lighter pink flower colour. 'Tobago' was excluded due to its larger flower size and darker purple eye zone. 'Kibon', 'Kilor', 'Nicoya' and 'Illusion' were finally chosen due to similarities in flower colour and foliage.

Comparative Trial Location: Macquarie Fields, NSW, summer 1999/2000. Conditions: trial conducted in a polyhouse, plants propagated from cutting, rooted cuttings planted into 150mm pots filled with soilless potting mix, nutrition maintained with slow release and liquid fertilisers, pest and disease treatments applied as required. Trial design: twelve pots of each variety arranged in a completely randomised design. Measurements: from ten plants at random. One sample per plant.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
The Netherlands	1993	Surrendered	'Kigre'
Denmark	1994	Surrendered	'Kigre'
EU	1995	Granted	'Kigre'
Germany	1993	Granted	'Kigre'
Italy	1994	Applied	'Kigre'
Japan	1994	Granted	'Kigre'
Poland	1997	Granted	'Kigre'
South Africa	1995	Granted	'Kigre'
Sweden	1994	Terminated	'Kigre'
USA	1994	Granted	'Grenada

First sold in Germany in Dec 1994. First Australian sale Dec 1996.

Description: **Ian Paananen,** Crop & Nursery Services, Central Coast, NSW.

Table 30 *Impatiens* varieties

	'Kibon'	'Kigre'	'Kinoc'	'Kilor'	*'Illusion'	*'Rose Celebration'	*'Nicoya'
PLANT HEIGHT (cm) LSD (P≤0.01) = 2.1							
– maximum							
mean	20.2 ab	21.8 ab	19.3 b	15.7 c	22.5 a	20.6 ab	12.5 d
std deviation	1.6	1.2	1.7	1.8	2.5	1.8	1.8
PLANT WIDTH (cm) LSD (P≤0.01) = 4.5							
– maximum							
mean	34.7 ab	37.2 ab	33.2 b	26.7 c	32.4 b	39.2 a	19.5 d
std deviation	2.5	4.1	3.7	3.3	4.9	4.8	3.5
LEAF LENGTH (mm) LSD (P≤0.01) = 14.6							
– including petiole on largest, fully expanded leaf below first flower on stem							
mean	151 a	135 ab	132 b	80 d	107 c	139 ab	73 d
std deviation	11.5	8.7	17.1	8.4	11.4	18.2	10.8
LEAF WIDTH (mm) LSD (P≤0.01) = 4.7							
– widest cross-section on largest, fully expanded leaf below first flower on stem							
mean	39.8 a	41.5 a	33.7 b	26.3 c	39.0 a	40.3 a	26.6 c
std deviation	4.8	5.8	3.4	1.3	3.3	5.5	2.6
LEAF SHAPE							
– measured leaf							
	elliptic	elliptic	elliptic	ovate	ovate	elliptic	ovate
LOWER SIDE OF LEAF BLADE GROUND COLOUR							
	red	red	green	green	red	green	green
FLOWER DIAMETER (mm) LSD (P≤0.01) = 4.8							
– widest cross-section wing to wing							
mean	58.7 ab	53.8 bc	51.2 c	39.5 d	58.4 ab	61.3 a	38.2 d
std deviation	4.8	3.0	3.7	5.0	4.1	5.2	2.9

Table 30 continued

FLOWER HEIGHT (mm) LSD (P≤0.01) = 3.9							
– widest cross-section standard to keel							
mean	59.5 [a]	57.2 [a]	57.7 [a]	39.6 [b]	57.5 [a]	61.0 [a]	40.0 [b]
std deviation	3.2	2.5	3.3	1.6	3.8	5.3	3.1
FLOWER: APEX OF STANDARD PETAL							
	apiculate	retuse	retuse	apiculate	apiculate	retuse	retuse
FLOWER: SIZE OF EYE ZONE							
	small	medium	small	small	medium-large	small	small
FLOWER: UPPER SIDE OF PETAL (RHS, 1995)							
main colour	55A-58D	52C	deeper than 57A	52B	52C	57A	61D
secondary colour	absent	absent	absent	absent	43C-D	absent	absent
eye zone colour	53A	80B with 57A streaks	66A	66A	57A	53B	57A

Mean values followed by the same letter are not significantly different at P≤0.01 according to an S-N-K test.

Lomandra spicata Matrush

'Joey'

Application No: 1999/ 088 Accepted: 27 Apr 1999.
Applicant: **Russell and Sharon Costin,** Trading as Limpinwood Gardens Propagation Nursery, Limpinwood, NSW.

Characteristics (Table 31, Figure 29) Plant: dwarf, herbaceous grass like tufted perennial. Stem: many short stems develop into dense compact plants. Leaves: very short, glossy, colour green (RHS 137B, 1995).

Origin and Breeding Open pollination followed by seedling selection: open pollinated cultivated *Lomandra spicata* seed was collected at applicant's nursery and sown for observation. The parental plants are characterised by large open and spreading growth habit. Several hundred seeds were germinated of which 6 exhibited various degrees of dwarfism. These were selected out, potted on and subject to various stress factors to check vigour and stability. Over a period of 12 months, 5 were rejected and the one was grown on for 2 more year and was put in stress condition including full sun and heat, leaching and nutrient deficiency. This seedling showed no bolting or reverted growth habit. Selection criteria: stable dwarfism. Propagation: vegetative by division and tissue culture. Breeder: Russel Costin, Limpinwood Gardens Propagation Nursery, Limpinwood, NSW.

Choice of Comparator in the absence of other varieties of common knowledge the parent species *Lomandra spicata* was chosen as the sole comparator.

Comparative Trial Location: Limpinwood Gardens Nursery, Limpinwood, NSW, Mar 2000 – Jun 2000. Conditions: trial conducted in the open on weed mat. Plants propagated by division and rooted plants potted into 140mm pots. Nutrition supplied with slow release fertiliser. Trial design: 30 plants of each variety arranged in 3 replicated randomised blocks. Measurements: from all trial plants.

Prior Applications and Sales First sold in Australia in May 1999.

Description: **David Hockings,** Maleny, QLD.

Table 31 *Lomandra* varieties

	'Joey'	***Lomandra spicata***
PLANT HEIGHT (mm)		
mean	140.67	652.83
std deviation	14.49	85.76
LSD/sig	39.09	P≤0.01
LEAF LENGTH (mm)		
mean	109.07	623.17
std deviation	24.23	92.94
LSD/sig	43.17	P≤0.01
LEAF WIDTH (mm)		
mean	3.37	9.17
std deviation	0.63	1.47
LSD/sig	0.72	P≤0.01
LEAF COLOUR (RHS, 1995)		
	green (137B)	yellow green (147A-148A)
NUMBER OF STEMS		
	many	few

Mangifera indica
Mango

'Red1'

Application No: 1998/072 Accepted: 19 May 1998.
Applicant: **Mr. Patrick Barnby Welburn,** Benaraby, QLD.

Characteristics (Table 32, Figure 45) Tree: open, upright, vigour low to moderate, fruit maturity season late. Young expanding leaf: strong red anthocyanin present. Fully expanded leaf: smooth, length medium (mean 22.2cm), width narrow to medium (mean 5.0cm), high length/width ratio (mean 4.4), horizontal attitude, short petiole, shape elliptic with attenuate tip and acute base, concave cross section, apical curvature of midrib, blade not twisted, leaf edge not undulated, terpenolene aroma present when crushed. Inflorescence: erect, medium length with main axis and secondary branches coloured red. Flowers: small to medium in size, anthers at same level as stigma. Fruit: late season maturity, length medium (mean 92.3mm), width medium (mean 80.4mm), length/width ratio medium (mean 1.15), shape ovate, cross section broad elliptic to circular, stalk cavity absent, neck absent, sinus absent, bulge proximal stylar scar absent, skin develops high levels of anthocyanin where sun-exposed, flesh very firm when ripe, texture smooth with low fibre, flesh colour orange. Sap exudation at harvest with sap burn and skin browning. Fruiting characteristic is bunch bearing (multiple fruits carried per inflorescence). Seed: small, monoembryonic.

Origin and Breeding Open pollination followed by seedling selection: open-pollinated seedlings of mango variety 'R2E2' were established on the applicant's property at Benaraby, QLD and the candidate selected at fruiting stage. Selection criteria: precocious, heavy-cropping, upright tree, with red-skinned, medium-sized, late maturing fruit. Propagation: monoembryonic cultivar vegetatively propagated by grafting on to seedling rootstocks. Breeder: Mr. Patrick Barnby Welburn**,** Benaraby, QLD.

Choice of Comparators 'R2E2' was chosen as it was the maternal parent while 'Kensington Pride' was chosen as it is likely that it is the paternal parent of the candidate. In addition, 'Kensington Pride' and 'R2E2' are the most common varieties within Australia.

Comparative Trial Location: Benaraby, QLD 1997 – 2000. Conditions: scions of the candidate and comparator varieties were grafted to polyembryonic seedlings of 'Kensington Pride and planted 6 x 7 m. Trees were grown on a clay loam soil. Pest and disease treatments applied as required. Fertiliser and irrigation followed commercial practice. Trial design: ten single tree replicates of each cultivar; planted in a completely randomised design. Measurements: 10-20 random measurements of each characterisitic from each replicate. Redness of skin colour was determined using a Minolta Chroma Meter CR-200 to measure the hue angle. Mean values were taken from measurements at three points from the shoulder to the basal end of the sun-exposed side of each fruit. The lower the hue angle the greater the red colouration.

Prior Applications and Sales Nil.

Description: **Dr. A.W. Whiley,** Queensland Horticulture Institute, Department of Primary Industries, Nambour, QLD.

Table 32 *Mangifera* varieties

	'Red1'	***'Kensington Pride'**	***'R2E2'**
MATURE LEAF			
Terpinolene aroma			
	present	present	absent
Cross-section shape			
	concave	concave	straight
Relief of upper surface			
	smooth	raised between veins	raised between veins
Shape of tip	attenuate	attenuate	acuminate
Shape of base	acute	acute	rounded
Petiole length (mm)			
mean	17.00	24.19	24.87
std deviation	2.58	4.05	3.01
LSD/sig	4.26	P≤0.01	P≤0.01
Lamina length (mm)			
mean	222.4	225.9	230.7
std deviation	17.0	14.2	9.3
LSD/sig	14.2	ns	ns
Lamina width (mm)			
mean	50.74	54.16	59.27
std deviation	4.22	3.22	2.75
LSD/sig	3.86	ns	P≤0.01
Length/width ratio			
mean	4.39	4.17	3.89
std deviation	0.17	0.11	0.07
LSD/sig	0.11	P≤0.01	P≤0.01
INFLORESCENCE			
Colour of axis and branches			
	red	pink	red
Anthocyanin in old flower			
	present	present	present
Axis diameter at base (mm)			
mean	6.57	7.42	9.68
std deviation	0.36	2.02	0.80
LSD/sig	1.32	ns	P≤0.01
Percentage of bunch-bearing inflorescences			
mean	59.5	25.8	18.2
std deviation	14.8	14.2	14.6
LSD/sig	12.7	P≤0.01	P≤0.01
MATURE FRUIT			
Ripe fruit: predominant skin colour			
	red	yellow and red	yellow and red
Ripe fruit: predominant flesh colour			
	orange	yellow	yellow
Ripe fruit: amount of fibre in flesh attached to stone			
	low	medium	low
Length (mm)			
mean	92.31	94.03	108.78
std deviation	2.45	1.90	1.38
LSD/sig	2.78	P≤0.01	P≤0.01

Table 32 continued

Width (mm)			
mean	80.36	82.74	110.12
std deviation	1.33	1.54	1.58
LSD/sig	2.20	P≤0.01	P≤0.01
Length/Width ratio			
mean	1.15	1.14	0.99
std deviation	0.02	0.02	0.01
LSD/sig	0.02	P≤0.01	P≤0.01
Weight (g)			
mean	338.9	356.8	703.5
std deviation	19.8	20.0	26.7
LSD/sig	32.8	ns	P≤0.01
Ripe colour (hue angle)			
mean	38.37	64.33	48.82
std deviation	3.73	3.51	4.49
LSD/sig	5.52	P≤0.01	P≤0.01
Embryonic type			
	mono-embryonic	poly-embryonic	mostly polyembryonic
TREE			
Form	erect	spreading	erect
Vigour	low – moderate	high	moderate
Fruit maturity season			
	late	early – mid	mid – late

Medicago littoralis x *Medicago tornata*
Disc Medic

'Toreador'

Application No: 1999/338 Accepted: 10 Feb 2000.
Applicant: **Minister for Primary Industries, Natural Resources and Regional Development,** Adelaide, SA.

Characteristics (Table 33, Figure 58) Plant: early maturing, semi erect. Leaf: no markings. Pod: anti-clockwise coil, length 3.1mm (2.5 to 3.8mm), width 4.2mm (2.7 to 5.1mm). Seed: per pod 5.7 seeds (4 to 7 seeds). Aphid Resistance: moderate to low resistance to spotted alfalfa aphid (SAA) and moderate resistant to bluegreen aphid (BGA).

Origin and Breeding Controlled pollination: 'Toreador' was developed in a planned breeding program from the following parentage, seed parent breeding line Z-243 ('Harbinger'/SA 10419 //3*'Harbinger') x pollen parent SA 11720. The breeding line Z-243 is the source of SAA and BGA resistance and was selected from F_8 aphid resistant progeny of the third backcross to 'Harbinger'. SA 11720 is an early flowering disc medic. The breeding program was aimed at developing a new cultivar for sand over clay to sandy loam alkaline soils with a rainfall of 250 to 450 mm. The final single plant selection designated as Z-1065 was tested in agronomic performance trials in SA, WA and VIC from 1994 to 1999. Selection criteria: aphid resistance (BGA, SAA), early flowering, seed yield and herbage production. Propagation: by seed. Breeder: Andrew Lake, SARDI, Northfield Research Laboratories, SA.

Choice of Comparators 'Herald', 'Harbinger', 'Tornafield' and 'Rivoli' were chosen for the comparative trial as these are similar varieties of common knowledge. 'Harbinger' was also used extensively in developing the seed parent Z-243.

Comparative Trial Field Trial Location: Urrbrae, Adelaide, SA (Latitude 34º56′ S, longitude 138º36′ E), winter-spring 1999. Conditions: trial conducted in field, plants propagated from seedlings, planted in jiffy pellets then planted in field after three weeks, fertiliser applied at 200 kg/ha. Trial design: 4 reps x 20 plants per rep arranged in a randomised block design. Measurements: flowering times per plant, 20 pod samples randomly collected throughout each replication.
Aphid Trial Location: as above. Conditions: trial conducted in temperature controlled glasshouses. Trial design: 6 reps x 1 punnet containing 25 plants per rep arranged in a randomised block design. Inoculated with aphids 2 to 3 weeks after planting, rated for aphid damage 4 weeks after inoculation. Measurements: scale from 1 to 5, (1 = resistant, 5 = susceptible). Control lines for SAA, 'Sephi' (res.) 'Borung' (sus.). Control lines for BGA, 'Sephi' (res.) 'Jemalong' (sus.)

Prior Applications and Sales Nil.

Description: Jeffrey R Hill, SARDI, Urrbrae, Adelaide, SA.

Table 33 *Medicago* varieties

	'Toreador'	***'Herald'**	***'Tornafield'**	***'Harbinger'**	***'Rivoli'**
LEAFLET					
markings	absent	present	present	absent	present
blotch	absent	present	absent	absent	absent
flecking	absent	absent	present	absent	present
POD COIL DIRECTION (Heyn, 1963)					
	anticlockwise	clockwise	anticlockwise	anticlockwise	clockwise
POD LENGTH (mm)					
mean	3.05	3.86	2.90	4.30	4.57
std deviation	0.29	0.32	0.35	0.30	0.37
LSD/sig	0.25	P≤0.01	ns	P≤0.01	P≤0.01

POD WIDTH (mm)					
mean	4.15	4.90	6.26	5.14	6.75
std deviation	0.48	0.30	0.37	0.35	0.36
LSD/sig	0.61	ns	P≤0.01	P≤0.01	P≤0.01
SEEDS PER POD					
mean	5.66	5.65	3.98	5.43	6.03
std deviation	0.84	0.81	0.67	0.94	0.92
LSD/sig	0.67	ns	P≤0.01	ns	ns
SPOTTED ALFALFA APHID (SAA) (*Theriophis trifolii* fm *maculata)* (1 = resistant, 5 = very susceptible)					
mean	2.7	2.0	3.6	4.9	4.7
	LR	MR	MS	VS	VS
BLUEGREEN APHID RESISTANCE (BGA) (*Acythosiphon kondoi)* (1= resistant, 5 = very susceptible)					
mean	1.7	1.7	4.2	3.5	3.2
	MR	MR	MS	LR/MS	LR

Note: MR = moderately resistant, LR = low resistance, MS = moderately susceptible, VS = very susceptible.

Medicago sativa
Lucerne, Alfalfa

'Alpha Express'

Application No: 1999/304 Accepted: 19 Apr 2000.
Applicant: **ABI Alfalfa Inc.,** Kansas, USA.
Agent: **Seedco Australia Co-operative Limited,** Hilton, SA.

Characteristics (Table 34, Figure 59) Plant: perennial, habit narrow, upright, height medium, very winter active (dormancy rating 10). Stem: green, anthocyanin absent, internodes medium, sparsely pubescent or glabrous. Leaf: trifoliate, central leaflet on pronounced pedicel, leaflet oblong-cuneate, sometimes denticulate at summit, moderately glabrous lower surface, sparsely glabrous upper. Inflorescence: oblong raceme to 30mm in length of 10 to 30 florets. Flower: light blue to (mostly) purple, pea type, standard approximately 3mm in length. Seed: typically 4 to 8 borne in coiled pod of 3-5 coils to 5mm length, bright yellow to khaki, 4 to 500/gm.

Origin and Breeding Recurrent Phenotypic Selection: 3 cycles of recurrent selection within a Middle Eastern lucerne line 'Quaryati' introduced into the USA and supplied to ABI Alfalfa. The original line was grown for intensive hay production for three years, and the most winter active, high yielding surviving plants selected and inter-pollinated. The progeny of this population then underwent a further two cycles of selection at Kingsberg, California for production and survival under conditions of high levels of *Phytophthora* root rot, *Fusarium* wilt and crown rot (*Colletotrichum trifolii*). The line ZX 9699 was produced from inter-pollination of elite surviving clones. 'Alpha Express' is derived directly from this breeding line. Selection criteria: winter vigour, dry matter yield, field resistance to *Phytophthora*, *Fusarium*, and crown rot. Propagation: by seed. Breeder: staff of ABI Alfalfa, Nampa, Idaho and Kingsberg, California, USA.

Choice of Comparators 'Rapide' was chosen because it is the most similar variety of common knowledge in terms of dormancy rating. 'CUF 101' and 'Hassawi' were chosen for the comparative trial, as 'CUF 101' is a benchmark cultivar for highly winter active types such as 'Alpha Express' and 'Hassawi' is similar to the parental material used to develop 'Alpha Express'. The other highly winter active (dormancy rating 9) lucerne cultivars of common knowledge, such as 'Pioneer L 90', 'Sceptre', 'Sequel', 'Sequel HR', 'WL 612', 'Siriver' were all considered as comparators, but all have significantly different pest and disease resistance spectra, and were therefore excluded from the trial. The original parental material 'Quaryati' was not included as it is highly susceptible (0% resistant) to *Colletotrichum trifolii,* where as the candidate variety is moderately resistant (50% resistant).

Comparative Trial Location: Currency Creek, or about 75km SSE of Adelaide, South Australia, between Aug 1999 and Mar 2000. Conditions: trial conducted in the field. The soil was a moderately fertile, free draining sandy loam of approximately pH 6. The trial was irrigated as required throughout the testing period. No chemical or fertiliser treatments were used and plots were hand weeded as required. Trial design: a randomised complete block with 4 replicates, each of 20 plants. Plants were seeded and raised in Jiffy 7 pellets in a shadehouse, and then transplanted into the field at approximately 5 weeks of age in Sep 1999. Each replicate was comprised of 20 plants in 4 rows, with 20 cm between plants and 50 cm between rows. Measurements: from all plants, or from whole rows as indicated.

Prior Applications and Sales Nil.

Description: **Andrew W.H. Lake,** Pristine Forage Technologies, Daw Park, SA.

Table 34 *Medicago* varieties

	'Alpha Express'	***'Rapide'**	***'CUF 101'**	***'Hassawi'**
AVERAGE DAYS TO FIRST 25% PLANTS FLOWERING – from plant cut off on 2/1/00				
mean	16.15^{b}	15.95^{b}	16.55^{b}	12.95^{a}
std deviation	0.39	0.46	0.78	0.50
(LSD at P≤0.01=0.94)				
NUMBER OF PLANTS/REP FLOWERING 16 DAYS AFTER CUTTING – from plant cut off on 2/1/00				
mean	7.23^{a}	9.73^{b}	6.73^{a}	11.48^{b}
std deviation	1.57	0.63	1.74	0.77
(LSD at P≤0.01=2.23)				

Table 34 continued

NUMBER OF PLANTS/REP WITH MEDIUM OR STRONG STEM PUBESCENCE				
(- data quoted is log transformed; ln (x +1))				
mean	0.58[a]	2.10[c]	1.31[b]	2.36[c]
std deviation	0.524	0.179	0.142	0.193
(LSD at P≤0.01=0.607)				
PRESENCE OF PLANTS WITH STRONG STEM PUBESCENCE				
	absent	present	very rare	present
(indicative %)	(<1%)	(~10%)	(~1%)	(~15%)

Note: mean values followed by the same letter are not significantly different at P≤0.01.

'58N57' syn **L90**

Application No: 1998/070 Accepted: 19 May1998.
Applicant: **Pioneer Hi-Bred International, Inc.,** Des Moines, IA, USA.
Agent: **Pioneer Hi-Bred Australia Pty Ltd,** Toowoomba, QLD.

Characteristics (Table 35, Figure 60) Plant: highly winter active, habit erect leafy, height at full flower (81.2cm), height in autumn after last cut (46.3cm), foliage dark green. Flower: late, colour dark blue to purple. Others: resistance to Spotted Alfalfa Aphid 57.7 % resistant, Resistance to Stem Nematode 27.4% resistant.

Origin and Breeding Polycross: a synthetic variety comprising of 180 parental plants originating from Pioneer two experimental lines. Ninety (90) parental plants from one experimental line were selected through phenotypic selection for resistance to anthracnose (race1) and stem nematodes using sequential inoculation. The other ninety (90) parental plants were selected from another experimental line through phenotypic selection for resistance to anthracnose (race 1). Seed was harvested from individual plants in "cage isolation" and bulked to produce Syn 1 seed. Selection criteria: forage yield, persistence, agronomic characteristics, disease and pest resistance. Propagation: seed. Breeder: Pioneer Hi-Bred International, Inc. Wagga Wagga, NSW, Australia and Kerman, CA, USA.

Choice of Comparators 'L69'(ф), 'CUF101', 'Aquarius', 'Sceptre'(ф) and 'Sequel HR'(ф) were chosen, as these are the most similar varieties of common knowledge on the basis of winter activity.

Comparative Trial Location: Wyreema, QLD, May 1998 to May 2000 Conditions: heavy self-mulching black clay. Trial design: 3 randomised replicated plots 1m x 5m x 5 rows, sown to achieve 150 plants/m^2. Measurements: 60 plants at random per variety.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1998	Applied	'58N57'

Description: **Rob Wilson,** Pioneer Hi-Bred Australia Pty Ltd, Wagga Wagga, NSW.

Table 35 *Medicago* varieties

	'58N57'	***'L69'**(ф)	***'CUF101'**	***'Aquarius'**	***'Sceptre'**(ф)	***'Sequel HR'**(ф)
PLANT HEIGHT (natural height 2 weeks after equinox, in 1st year) very tall=9, medium=5, very short=1						
rank	8	7	8	8	7	8
PLANT HEIGHT (cm) 22/5/00 (autumn stems extended, after last cut)						
mean	46.3	44.3	49.3	48.3	46.9	47.8
std deviation	3.874	5.253	3.803	3.244	3.655	2.992
LSD/sig	1.87	P≤0.01	P≤0.01	P≤0.01	ns	ns
PLANT HEIGHT (cm) 26/6/00 (winter stems extended)						
mean	27.9	25.1	27.3	25.1	25.7	27.8
std deviation	3.772	3.849	3.52	4.461	3.727	3.082
LSD/sig	1.49	P≤0.01	ns	P≤0.01	P≤0.01	ns
PLANT HEIGHT (cm) 16/10/99 (spring stems extended, after first cut)						
mean	56.6	52.2	58.9	58	53.3	56.7
std deviation	4.046	6.211	4.591	3.759	4.351	4.988
LSD/sig	1.70	P≤0.01	P≤0.01	ns	P≤0.01	ns
PLANT HEIGHT (cm) 21/02/00 (stems extended, including head, at full flower)						
mean	81.2	78.1	81.1	76.8	76.6	78.4
std deviation	5.54	6.425	5.961	7.601	4.658	4.609
LSD/sig	2.26	P≤0.01	ns	P≤0.01	P≤0.01	P≤0.01
PLANT GROWTH HABIT						
	erect	semi-erect	erect	erect	erect	erect
PLANT FOLIAGE GREEN COLOUR						
	dark	medium	light	dark	medium	medium

TIME OF BEGINNING OF FLOWERING	late	late	late	late	late	late
[a]FLOWER COLOUR	dp/p 96% var 4% traceCYW	dp/p 93% var 7%	dp/p 94% var 6%	dp/p 100%	dp/p 97% var 3%	dp/p 100%
[b]RESISTANCE TO SPOTTED ALFALFA APHID *Therioaphis maculata*						
% resistant	57.7	55.8	40.8	32.6	49.0	n/a
[b]RESISTANCE TO STEM NEMATODE *Ditylenchus dipsaci*						
% resistant	27.4	6.5	10.5	46.7	37.6	n/a
[c]RESISTANCE TO COLLETOTRICHUM CROWN ROT *Colletotrichum trifolii*						
% resistant	78.0	68.3	0.0	0.0	0.0	n/a
[c]RESISTANCE TO PHYTOPHTHORA ROOT ROT *Phytophthora medicaginis*						
% resistant	60.1	24.0	33.1	76.6	34.2	n/a

[a] Flower colour assessment as per US Dept of Ag Handbook 'A system for visually classifying Alfalfa flower colour'

[b] Test carried out by Pioneer Hi-Bred International, Inc. Connell, WA, USA.

[c] Test carried out by Pioneer Hi-Bred International, Inc Arlington, WI. USA

'PR5681' syn **L55**

Application No: 1998/071 Accepted: 19 May1998.
Applicant: **Pioneer Hi-Bred International, Inc.,** Des Moines, IA, USA.
Agent: **Pioneer Hi-Bred Australia Pty Ltd,** Toowoomba, QLD.

Characteristics (Table 36, Figure 61) Plant: semi-winter dormant, habit semi-erect leafy, height in autumn after last cut (38.0cm), height at full flower (75.0cm), and foliage medium green. Flower: medium, colour purple to dark purple with variegation. Others: resistance to Spotted Alfalfa Aphid 44.4% resistant, resistance to Stem Nematode 22.6% resistant, resistance to *Colletotrichum* crown rot 54.5%.

Origin and Breeding Polycross: a synthetic variety comprising of 195 parental plants originating from three lines. Sixty-five (65) parental plants were selected through phenotypic selection for resistance to *Phytophthora* root rot and Anthracnose (race 1) using sequential inoculations from a Pioneer experimental line. One hundred and thirty (130) parental plants were selected through phenotypic selection to spring black stem from another Pioneer experimental line and 'Archer'. Seed was harvested from individual plants in "cage isolation" and bulked to produce Syn 1 seed. Selection Criteria: forage yield, persistence, agronomic characteristics, pest and disease resistance. Propagation: seed. Breeder: Pioneer Hi-Bred International, Inc. Quarryville, PA, USA.

Choice of Comparators 'L52', 'Aurora', 'Quadrella'(b) and 'WL Southern Special' were chosen, as these are the most similar varieties of common knowledge on the basis of winter activity. 'CUF101' although not similar but could be traced back as a parent in the experimental lines.

Comparative Trial Location: Wyreema, QLD, May 1998 to May 2000 Conditions: heavy self-mulching black clay. Trial design: 3 randomised replicated plots 1m x 5m x 5 rows, sown to achieve 150 plants/m^2. Measurements: 60 plants at random per variety.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Argentina	1996	Granted	'5681'
USA	1996	Granted	'5681'

First sold in USA in Sep 1996. First Australian sale May 1997.

Description: **Rob Wilson,** Pioneer Hi-Bred Australia Pty Ltd, Wagga Wagga, NSW.

Table 36 *Medicago* varieties

	'PR 5681'	***'L52'**	***'CUF101'**	***'Aurora'**	***'Quadrella'**ϕ	***'WL Sth Spl'**
PLANT HEIGHT (natural height 2 weeks after equinox, in 1st year) very tall=9, medium=5, very short=1						
rank	5	5	8	7	7	6
PLANT HEIGHT (cm) 22/5/00 (autumn stems extended, after last cut)						
mean	38	34.2	49.3	40.1	39.7	39.7
std Dev	4.509	4.767	3.803	3.294	3.089	3.384
LSD/sig	1.86	P≤0.01	P≤0.01	P≤0.01	ns	ns
PLANT HEIGHT (cm) 26/6/00 (winter stems extended)						
mean	18.1	17.7	27.3	19.4	20.3	19.3
std Dev	2.309	2.62	3.52	2.953	2.294	2.684
LSD/sig.	1.01	ns	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (cm) 16/10/99 (spring stems extended, after first cut)						
mean	50.8	43.5	58.9	51	49.7	49.7
std Dev	3.814	4.272	4.591	3.275	2.757	4.232
LSD/sig	1.40	P≤0.01	P≤0.01	ns	ns	ns
PLANT HEIGHT (cm) 21/02/00 (stems extended, including head, at full						
mean	75	74.3	81.1	77.5	79.1	76.9
std Dev	6.273	6.828	5.961	6.455	5.82	6.124
LSD/sig	2.43	ns	P≤0.01	P≤0.01	P≤0.01	ns
PLANT GROWTH HABIT						
	semi-erect	semi-erect	erect	erect	erect	erect
PLANT FOLIAGE GREEN COLOUR						
	medium	dark	light	dark	medium	medium
TIME OF BEGINNING OF FLOWERING						
	medium	medium	late	medium to late	late	medium to late
[a]FLOWER COLOUR						
	dp/p 76% var 22% cream 1% yellow 1%	dp/p 99% var 1%	dp/p 94% var 6%	dp/p 91% var 9%	dp/p 90% var 10%	dp/p 98% green 1% white 1%
[b]RESISTANCE TO SPOTTED ALFALFA APHID (*Therioaphis maculata*)						
% resistant	44.4	50.6	40.8	35.5	44.9	n/a
[b]RESISTANCE TO STEM NEMATODE (*Ditylenchus dipsaci*)						
% resistant	22.6	49.1	10.5	44.5	46.3	n/a
[c]RESISTANCE TO COLLETOTRICHUM CROWN ROT (*Colletotrichum trifolii*)						
% resistant	74.5	3.2	n/a	5.2	17.7	2.5
[c]RESISTANCE TO PHYTOPHTHORA ROOT ROT (*Phytophthora medicaginis*)						
% resistant	74.9	38.7	33.1	31.0	28.4	n/a

[a] Flower colour assessment as per US Dept of Ag Handbook 'A system for visually classifying Alfalfa flower colour'

[b] Test carried out by Pioneer Hi-Bred International, Inc. Connell, WA, USA.

[c] Test carried out by Pioneer Hi-Bred International, Inc. Arlington, WI, USA

'PR5939'

Application No: 1998/069 Accepted: 19 May1998.
Applicant: **Pioneer Hi-Bred International, Inc.,** Des Moines, IA, USA.
Agent: **Pioneer Hi-Bred Australia Pty Ltd,** Toowoomba, QLD.

Characteristics (Table 37, Figure 62) Plant: highly winter active, habit erect leafy, height in autumn after last cut (51.8cm), height at full flower (79.6cm), and foliage medium green. Flower: late, colour purple to dark purple. Others: resistance to Spotted Alfalfa Aphid 57.7% resistant, resistance to Stem Nematode 20.6% resistant.

Origin and Breeding Polycross: a synthetic variety comprising of 156 parental plants originating from '5715', 'UC Cibola' and one Pioneer experimental line (86PN731) that traces back to 'CUF101'. Seed was harvested from

individual plants in "cage isolation" and bulked to produce Syn 1 seed. Parent plants were selected through phenotypic recurrent selection for resistance to anthracnose (race 1) and *Phytophthora* root rot. Selection Criteria: forage yield, agronomic characteristics, disease and pest resistance. Propagation: seed. Breeder: Pioneer Hi-Bred International, Inc, Kerman, CA, and Johnston, IA, USA.

Choice of Comparators 'L69'(ф), 'CUF101', 'Aquarius', and 'Sequel' were chosen, as these are the most similar varieties of common knowledge on the basis of winter activity. 'CUF101' could be traced back as a parent in the experimental line.

Comparative Trial Location: Wyreema, QLD, May 1998 to May 2000 Conditions: heavy self-mulching black clay. Trial design: 3 randomised replicated plots 1m x 5m x 5 rows, sown to achieve 150 plants/m^2. Measurements: 60 plants at random per variety.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Argentina	1995	Granted	'5939'
USA	1996	Granted	'5939'
Uruguay	1997	Applied	'Pioneer 5939'

First sold in USA in Oct 1995. First Australian sale nil.

Description: **Rob Wilson,** Pioneer Hi-Bred Australia Pty Ltd, Wagga Wagga, NSW.

Table 37 *Medicago* varieties

	'PR 5939'	*'L69'(ф	*'CUF101'	*'Aquarius'	*'Sequel'
PLANT HEIGHT (natural height 2 weeks after equinox, in 1st year) very tall=9, medium=5, very short=1					
rank	8	7	8	8	7
PLANT HEIGHT (cm) 22/5/00 (autumn stems extended, after last cut)					
mean	51.8	44.3	49.3	48.3	45.7
std deviation	4.833	5.253	3.803	3.244	3.902
LSD/sig	2.06	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (cm) 26/6/00 (winter stems extended)					
mean	29.4	25.1	27.3	25.1	21.7
std deviation	2.36	3.849	3.52	4.461	3.134
LSD/sig	1.28	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (cm) 16/10/99 (spring stems extended, after first cut)					
mean	62.2	52.2	58.9	57.9	54.4
std deviation	6.071	6.211	4.591	3.759	4.615
LSD/sig	1.83	P≤0.01	P≤0.01	P≤0.01	P≤0.01
PLANT HEIGHT (cm) 21/02/00 (stems extended, including head, at full flower)					
mean	79.6	78.1	81.1	76.8	72.1
std deviation	5.901	6.425	5.961	7.601	4.843
LSD/sig	2.32	ns	ns	P≤0.01	P≤0.01
PLANT GROWTH HABIT					
	erect	semi-erect	erect	erect	erect
PLANT FOLIAGE GREEN COLOUR					
	medium	medium	light	dark	medium
TIME OF BEGINNING OF FLOWERING					
	late	late	late	late	late
[a]FLOWER COLOUR					
	dp/p 100%	dp/p 93% (var 7%)	dp/p 94% (var 6%)	dp/p 100%	dp/p 98% (var 2%)
[b]RESISTANCE TO SPOTTED ALFALFA APHID (*Therioaphis maculata*)					
% resistant	46.6	55.8	40.8	32.6	43.0
[b]RESISTANCE TO STEM NEMATODE (*Ditylenchus dipsaci*)					
% resistant	20.6	6.5	10.5	46.7	21.7
[c]RESISTANCE TO COLLETOTRICHUM CROWN ROT (*Colletotrichum trifolii*)					
% resistant	30.7	68.3	0.0	0.0	9.1
[c]RESISTANCE TO PHYTOPHTHORA ROOT ROT (*Phytophthora medicaginis*)					
% resistant	55.3	24.0	33.1	76.6	52.1

[a] Flower colour assessment as per US Dept of Ag Handbook 'A system for visually classifying Alfalfa flower colour'

[b] Test carried out by Pioneer Hi-Bred International, Inc. Connell, WA, USA.

[c] Test carried out by Pioneer Hi-Bred International, Inc. Arlington, WI, USA

Pelargonium tricolor
Pelargonium

'PEL001'

Application No: 1999/292 Accepted: 22 Oct 1999.
Applicant: **Frank Hammond,** Narre Warren North, VIC.

Characteristics (Table 38, Figure 20) Plant: evergreen, perennial sub-shrub, stem short branching, leaf arrangement opposite. Leaf: petiolate, pubescent, dentate, shape ovate to broad elliptic, variegated, colour on upper side yellow green (RHS 147A) and greyed green (RHS 191A) in the centre and greyed yellow (RHS 160B) at the marginal rim (2 to 5 mm), colour on under side greyed green (RHS 189A, 191B) at the centre and greyed yellow (RHS 160B) at the marginal rim. Inflorescence: terminal clusters of 2, 3 and 4 flowers, flower width 35 mm. Calyx; sepal length 14 to 16 mm, colour red (RHS 39A) and pale red (RHS 38B). Corolla; 5 petal butterfly type, upper 2 petals rounded, entire, width 18 to 20 mm, colour red purple (RHS 67A) with pale red purple flecks (RHS 69D) and large black basal spot, lower 3 petals obovate, entire, width 10 to 12 mm, colour pale red purple (RHS 69D) with darker marginal tinge. Stamen; filaments dark red purple, anther reddish. Ovary; superior, colour red (RHS 54A), style dark red purple, stigma 5, colour dark red purple. (Note: all RHS numbers referred to were based on the 1986 edition.)

Origin and Breeding Spontaneous mutation: from 'Splendide' at applicant's nursery in 1997. The parental variety is characterised by non-variegated leaves. Selection criteria: 'PEL001' was chosen on the basis of leaf variegation. Propagation: a number of mature stock plants were generated from the original mutation by cuttings through several generations to confirm uniformity and stability. 'PEL001' will be commercially propagated by cuttings. Breeder: Frank Hammond, Narre Warren, North VIC.

Choice of comparator 'Splendide' was chosen because it is the parent plant. No other similar varieties have been identified.

Comparative Trial Location: Narre Warren North, VIC between Jan – Sep 2000. Conditions: unheated polyhouse under southern Victorian (Latitude 38ºS) conditions; plants begun as cuttings Jan 2000, transplanted to 137 mm pots in May; media soilless, fertiliser controlled release. Trial design: paired replicates. Measurements: twenty specimens selected from twenty plants.

Prior Applications and Sales Nil.

Description: **David Nichols,** Rye, VIC.

Table 38 *Pelargonium* varieties

	'PEL100'	***'Splendide'**
PLANT HEIGHT (cm)		
mean	15.9	18.9
std deviation	1.1	1.4
LSD/sig	1.0	P≤0.01
PLANT WIDTH (cm)		
mean	28.3	34.0
std deviation	2.7	5.0
LSD/sig	4.3	P≤0.01
LEAF CHARACTERISTICS		
variegation	present	absent
colour upper side (RHS, 1986)	147A, 191A, 160B	147A
colour lower side (RHS, 1986)	189A, 191B, 160B	189A
LOWER PETAL WIDTH (mm)		
mean	11.4	12.8
std deviation	0.8	0.4
LSD/sig	0.9	P≤0.01
SEPAL COLOUR (RHS, 1986)	39A, 38B	64A, 146C

Prunus domestica x *Prunus armeniaca*
Plumcot

'Flavor Supreme'

Application No: 1994/166 Accepted: 22 Aug 1994.
Applicant: **Zaiger's Inc. Genetics**, Modesto, California, USA.
Agent: **Fleming's Nurseries & Associates Pty Ltd,** Monbulk, VIC.

Characteristics (Figure 46) Tree: size large, vigorous, habit semi-upright, dense, productive, bearing regular, trunk size medium-large, trunk surface shaggy, trunk colour brown to greyish brown, branch size medium, branch surface medium rough, lenticels medium number, lenticel size medium to large. Leaves: size large, form oblanceolate, margin finely serrate, texture smooth, petiole mean length 28.6mm, petiole mean length 1.6mm, nectary form globose, nectary number varying from 1 to 4, nectary mean number 2, colour upper surface green to dark green, lower surface green to dull green (RHS 146B). Flower: bud size medium, bud form plump – free, size medium, colour white (RHS 155D), pollen present. Fruit: size medium, mean diameter axially 57.2mm, mean transversely in suture plane 54mm, form globose to slightly flattened on stem end, suture shallow nearly smooth extending from base to apex, base retuse, apex rounded to very slightly pointed, cavity rounded to slightly elongated in suture plane mean depth 9.5mm, mean breadth 12.7mm. Skin: thickness medium, texture medium, down wanting, bloom moderate to heavy, colour violet brown (RHS 187A) to purplish grey mottled with small lighter coloured dots randomly spaced. Flesh: texture firm but delicate intermediate between plum and apricot, ripens fairly uniform slightly later at stem end, juice moderate, flavour sweet, fibres few, colour deep red to orange, slightly lighter colour near stem cavity. Stone: type clingstone, size medium mean length 23.8mm, mean thickness 7.9mm, form ovid, surface regular pitted only slightly throughout ridges near base extending across the surface on both sides of the suture plane, side equal to unequal, base rounded to straight, apex acuminate, colour reddish brown (RHS 181B). Keeping quality and shipping quality good.

Origin and Breeding Controlled pollination: originated from an interspecific cross between a plum selection 5G1230 (seed parent) and a plumcot selection 4G1180 (pollen parent) in an experimental orchard located in Modesto, California, USA. Both parents were selected from a group of open pollinated Red Beaut Plum (US Plant Patent 2539) seedlings grown in the experimental orchard. Selection criteria: fruit quality. Propagation: asexually reproduced by budding and grafting onto plum rootstock. Breeder: Zaiger's Inc. Genetics, Modesto, California, USA.

Choice of Comparator 'Donsworth' and 'Mariposa' have been selected as the closest varieties of common knowledge. 'Donsworth' differs from 'Flavor Supreme' as it has rounded heart-shaped fruit and matures 10 days after 'Flavor Supreme'. 'Mariposa' has a semi-freestone type stone and rounded-heart shaped fruit that matures 22 days after 'Flavor Supreme'. 'Flavor Supreme' has rounded to slightly flattened at stem end and has a clingstone. The seed and pollen parent were not considered as comparators as these are non-commercial breeding lines within breeder's private collection.

Comparative Trial The information contained herein is based on overseas data sourced from the United States Plant Patent Number 6,763, dated April 25, 1989. The trial was conducted Modesto in California, USA. The overseas data was verified under Australian growing conditions where possible.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1987	Granted	'Flavor Supreme'

First sold in the USA in Apr 1989. First Australian Sale Jul 1996.

Description: **Zoee Maddox,** Fleming's Nurseries Pty. Ltd., Monbulk, VIC.

Prunus persica var *nucipersica*
Nectarine

'Bright Pearl' syn **Bright Ice**

Application No: 1999/080 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 48) Tree: size large, vigorous, growth spreading and dense, very productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour brownish grey (5.6YR3.4/0.9); lenticels numerous, colour dark orange yellow (9.3YR6.0/7.9), average size 4.8-9.5mm. Branches: size medium, texture rough and coarse, colour of 1st year wood topside greyish pink (2.6R 7.2/2.3) when exposed to sunlight, 1st year wood underside light yellow green (5.0GY 8.4/5.6), older wood moderate brown (5.6YR3.5/3.9); lenticels numerous, medium, colour dark orange yellow (8.6YR 6.0/12.1), average size 3.2mm. Leaf blade: size medium, average length 133.4mm, average width 38.1mm, shape elliptical, apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined. Petiole: average length 12.7mm, average thickness 1.6mm, dorsal colour brilliant yellow green (4.9GY8.2/9.1), ventral colour light yellow green (5.0GY8.4/5.6). Stipules: numerous, average length 4.8-6.4mm. Nectaries: 2 per leaf, slightly alternately positioned on petiole and base of blade, size small, form globose, colour light yellow green (5.0GY8.4/5.6). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium, size large, colour moderate pink (2.8R7.2/5.3). Fruit: size uniform, large, average diameter axially 63.8mm, average transversely in suture plane 69.9mm, shape globose, uniform, mostly symmetrical with a few unsymmetrical; inconspicuous suture line extending from the base to slightly beyond the apex, having a slight depression beyond the pistil point. Stalk cavity: flaring, circular, suture showing on one side, depth 9.5mm, breadth 22.2mm; base rounded and truncate, apex rounded, pistil point negligible in length, mostly oblique and depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none, colour very dark red (4.2r1.2/4.8) blending to deep red (5.1R2.8/10.1) over 90% of the surface with pale orange yellow (9.2YR8.7/4.4) freckling toward the apex, with sun protected areas having pale yellow green (3.4GY8.7/2.4) background. Flesh: colour white (2.5PB9.5/0.2) to pale yellow green (3.4GY8.7/2.4) with some deep red (5.1R2.8/10.1) streaking very near the stone, space of pit cavity deep red (5.1R2.8/10.1), amygdalin wanting, juice abundant, rich; texture extremely firm, tough, non-melting; fibers abundant, fine; ripens evenly, slightly earlier at apex and lips, flavour non-acidic and very sweet, with 18 to20 brix; aroma moderate. Stone: type clingstone, shape oval to obvoid, base straight, apex acuminate, sides slightly unequal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base; colour moderate reddish brown (9.0R3.4/5.2) on the outside, light reddish brown (0.5YR5.5/4.1) on the inside; tendency to split very slight. Kernel: shape oval, taste bitter, viable, average width 14.3mm, average length.- 20.6mm, skin colour deep orange yellow (8.6YR6.0/12.1) with greyish brown (5.5YR3.5/1.8) veins or lines running from the pellicle to the apex, pellicle colour greyish brown (5.5YR3.5/1.8), amygdalin abundant. Fruit maturity: hard ripe Jan 10, date of first picking Jan 5, date of last picking Jan 15 on trial plants. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'Red Glen' x pollen parent unnamed seedling in a planned breeding program in Le Grand, California, USA in 1992. The seed parent 'Red Glen' (U. S. Plant Patent 7193) is distinguished by yellow flesh colour. The pollen parent is a white fleshed nectarine which was previously developed in the same breeding program by crossing 'August Red' (U. S. Plant Patent 6363) and 'Bradcrim' (U. S. Plant Patent 8461). The pollen grand parents, 'August Red' is distinguished by yellow flesh colour and 'Bradcrim' is distinguished by 23 days earlier maturity than the candidate variety. Selection criteria: white flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Red Glen' (U. S. Plant Patent 7193) and 'Summer Bright' (U. S. Plant Patent 7049) on the basis that the candidate has intermediate maturity between the comparators. 'Red Glen' is also the seed parent of the candidate. However, the major difference between the varieties is the new variety is white fleshed and the comparators are both yellow fleshed. The pollen grand parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U. S. Plant Patent 9359. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1995	Granted	'Bright Pearl'
New Zealand	1997	Applied	'Bright Pearl'
South Africa	1998	Applied	'Bright Pearl'

First sold in the USA in Dec 1994.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'Diamond Bright' syn Crimson Bright

Application No: 1999/074 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 49) Tree: size large, vigorous, growth spreading and dense, very productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour dark brown (5.3YR1.6/3.4); lenticels numerous, colour moderate yellowish brown (9.5YR4.4/3.9), average size 3.2- 9.5mm. Branches: size medium, texture rough and coarse, colour of 1st year wood topside dark red (4.0R2.8/6.8), 1st year wood underside moderate yellow green (4.8GY6.0/5.0), older wood moderate brown (5.6YR3.5/3.9); lenticels numerous, very small, colour light yellowish brown (8.7YR6.5/5.0), average size 1.6 mm. Leaf blade: size medium, average length 133.4mm, average width 36.5mm, shape elliptical, apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7Y3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined. Petiole: average length 11.1mm, average thickness 1.6mm, colour brilliant yellow green (4.9GY8.2/9.1). Stipules: moderate in number, average length 6.4mm. Nectaries: 2 to 4 per leaf, usually oppositely positioned but occasionally alternately positioned on petiole and base of blade with a few singles, size small, shape reniform, colour greyish red (4.0R4.4/4.8). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium, size large, colour light purplish pink (4.6RP8.0/5.5). Fruit: size uniform, medium, average diameter axially 63.5mm, average transversely in suture plane 66.7mm, shape uniform, globose; inconspicuous suture line becoming a shallow groove toward the apex, extending from the base to just beyond the apex, with a slight depression beyond the pistil point. Stalk cavity: flaring, circular, suture showing on one side, depth 9.5mm, breadth 15.9mm, base rounded, truncate, apex uniform, pistil point negligible in length, mostly apical and depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none, colour very dark red (4.2R1.2/4.8) with deep red (5.1R2.8/10.1) background and slight moderate orange yellow (8.7YR7.2/8.3) freckling near the apex. Flesh: colour light orange yellow (9.4YR8.3/6.8) virtually to pit with only very slight strong red (4.0R4.4/12.1) streaking close to the stone, amygdalin moderate; juice abundant, rich; texture very firm, fine, crisp; fibers abundant, fine; ripens evenly, flavour very delicious blend of acid and sugar with 15 to 17 brix, aroma moderate. Stone: type clingstone, shape oblong to elliptical, base straight, apex acute, sides equal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour pale orange yellow (9.2YR8.7/4.4) when dry, tendency to split very slight. Kernel: shape oval, taste bitter, viable only with embryo culture, average width 12.7mm, average length 19.1mm, skin colour pale yellow (4.4Y7.2/3.8) when first cracked, pellicle colour light greyish yellowish brown (9.7YR6.4/2.5), amygdalin moderate. Fruit maturity: hard ripe Dec 9, date of first picking Dec 2, (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'August Red' x pollen parent 'Aurora Grand' in a planned breeding program in Le Grand, California, USA in 1992. The seed 'August Red' (U. S. Plant Patent 6363) is distinguished by its much later maturity than the candidate variety and the pollen parent 'Aurora Grand' (U. S. Plant Patent 4792) is distinguished by its freestone. Selection criteria: yellow flesh colour and early maturity. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Rose Diamond' (U. S. Plant Patent 7421) and 'Spring Bright' (U. S. Plant Patent 7507) on the basis of yellow flesh colour. However, the major difference between the varieties is the new variety has intermediate maturity between the comparators. The parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U.S. Plant Patent 9495. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1995	Granted	'Diamond Bright'
France	1996	Granted	'Diamond Bright'

First sold in the USA in Dec 1995.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'Fire Pearl' syn Fire Ice

Application No: 1999/079 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 50) Tree: size large, vigorous, growth spreading and dense, very productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour dark greyish yellowish brown (8.8YR2.5/1.6); lenticels numerous, colour moderate orange yellow (8.7YR7.2/8.3), average size 3.2 - 7.9mm. Branches: size medium, texture rough and coarse; colour of 1st year wood topside light greyish red (5.3R5.9/3.5) when exposed to sunlight, 1st year wood underside light yellow green (5.0GY8.4/5.6), older wood moderate yellowish brown (9.5YR4.4/3.9); lenticels numerous, small, colour dark orange yellow (9.3YR6.0/7.9), average size 1.6-3.2mm. Leaf blade: size medium, average length 139.6mm, average width 38.1mm, shape elliptical, apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined. Petiole: average length 9.5mm, average thickness 1.6mm, dorsal colour brilliant yellow green (4.9GY8.2/9.1), ventral colour very light yellowish green (0.2G8.6/4.6). Stipules: numerous, average length 4.8mm. Nectaries: 2 per leaf, alternately positioned on petiole and base of blade, size very small, shape globose, colour brilliant yellow green (4.9GY8.2/9.1). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium, size large, colour moderate pink (2.8R7.2/5.3). Fruit: size uniform, large, average diameter axially 66.7mm, average transversely in suture plane 66.7mm, shape globose, uniform, mostly symmetrical with a few unsymmetrical; an inconspicuous suture line toward the base becoming a shallow groove toward the apex, extending from the base to beyond the apex, having a slight depression beyond the pistil point. Stalk cavity: flaring, elongated in suture plane, suture showing on one side, depth 11.1mm, breadth 19.1mm, base somewhat cuneate and truncate, apex cuneate, pistil point negligible in length, mostly apical and depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none, colour deep red (5.1R2.8/10.1) blending to dark pink (2.7R5.9/6.1) over a pale yellow green (3.4GY8.7/2.4) background, with moderate orange yellow (8.7YR7.2/8.3) freckling toward the apex. Flesh: colour white (2.5PB9.5/0.2) to pinkish white (5.8R9.0/0.8) with some moderate red (3.8R4.4/9.1) streaking very close to the stone, surface of pit cavity moderate red (3.8R4.4/9.1), amygdalin wanting; juice abundant, rich; texture extremely firm, tough, non-melting; fibers abundant, fine; ripens evenly, flavour non-acidic and very sweet with averaging 18 brix; aroma slight. Stone: type clingstone, shape very oval, base straight, apex acute, sides slightly unequal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour moderate yellowish brown (9.5YR4.4/3.9), tendency to split very slight. Kernel: shape oval, taste bitter, viable, average width 12.7mm, average length 19.1mm. skin colour pale yellow (4.7Y9.0/3.8) when first cracked, pellicle colour dark brown (5.3YR1.6/3.4), amygdalin abundant. Maturity: hard ripe Jan 16, date of first picking Jan 9, date of last picking Jan 21 on trial plants. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'Red Glen' x pollen parent unnamed seedling in a planned breeding program in Le Grand, California, USA in 1992. The seed parent 'Red Glen' (U. S. Plant Patent 7193) is distinguished by yellow flesh colour. The pollen parent is a white fleshed nectarine which was previously developed in the same breeding program by crossing 'August Red' (U. S. Plant Patent 6363) and 'Bradcrim' (U. S. Plant Patent 8461). The pollen grand parent, 'August Red' is distinguished by yellow flesh colour and 'Bradcrim' is distinguished by 30 days earlier maturity than the candidate variety. Selection criteria: white flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Red Glen' (U. S. Plant Patent 7193) and 'Summer Fire' (U. S. Plant Patent 7506) on the basis of similar maturity period. 'Red Glen' is also the seed parent of the candidate. However, the major difference between the varieties is the new variety is white fleshed and the comparators are both yellow fleshed. The pollen grand parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U. S. Plant Patent 9358. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1995	Granted	'Fire Pearl'
New Zealand	1997	Applied	'Fire Pearl'
Chile	1998	Granted	'Fire Pearl'

First sold in the USA in Dec 1994.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'Grand Pearl' syn **Grand Ice**

Application No: 1999/078 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 51) Tree: size medium, vigour medium, growth spreading and dense, very productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour dark brown (5.3YR1.6/3.4); lenticels numerous, colour light brown (5.4YR5.4/4.8), average size 3.2- 9.5mm. Branches: size medium, texture rough and coarse; colour of 1st year wood topside greyish pink (2.6R7.2/2.3) when exposed to sunlight, 1st year wood underside strong yellow green (5.4GY6.0/8.7), older wood strong yellowish brown (8.8YR4.6/8.5); lenticels numerous, small, colour strong orange yellow (9.1YR7.1/11.6), average size 1.6mm. Leaf blade: size medium, average length 139.7mm, average width 36.5mm, shape elliptical, apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined. Petiole: average length 12.7mm, average thickness 1.6mm, colour moderate yellow green (4.8GY6.0/5.0). Stipules: numerous, average length 11.1mm. Nectaries: 2 to 4 per leaf, alternately positioned on petiole and base of blade, size medium, shape reniform, colour brilliant yellow green (4.9GY8.2/9.1). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium to late, size large, colour pale purplish pink (3.7RP8.4/3.3). Fruit: size uniform, medium, average diameter axially 65.1mm, average diameter transversely in suture plane 65.1mm, shape globose to ovate, uniform, mostly symmetrical; inconspicuous suture line extending from the base to beyond the apex having a slight depression beyond the pistil point and becoming a fairly sharp groove very close to the cavity. Stalk cavity: flaring, circular, with some stalk markings typical, depth 9.5mm, breadth 22.2mm; base rounded to truncate, apex rounded, pistil point negligible in length, mostly apical and depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none, colour dark red (4.0R2.8/6.8) blending to strong red (4.0R4.4/12.1) with light yellowish brown (8.7YR6.5/5.0) freckling toward the apex. Flesh: colour white (2.5PB9.5/0.2) to pale yellow green (3.4GY8.7/2.4) with some deep red (5.1R2.8/10.1) streaking very close to the stone, surface of pit cavity clingstone, amygdalin wanting, juice abundant, rich; texture very firm, tough, crisp; fibers abundant, fine; ripens evenly; flavour non-acidic and very sweet with 16 to 18 brix; aroma moderate. Stone: type clingstone, shape oval, base straight, apex acute, sides equal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour moderate brown (5.6YR3.5/3.9), tendency to split none. Kernel: shape oval, taste bitter, viable, average width 11.1mm, average length 17.5mm, skin colour brilliant orange yellow (0.1Y8.1/10.5) with moderate brown (5.6TR3.5/3.9) veins running from the pellicle to the apex, pellicle colour greyish brown (5.5YR3.5/1.8), amygdalin abundant. Maturity: hard ripe Jan 2, date of first picking Dec 27, date of last picking Jan 11 on trial plants. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'Red Glen' x pollen parent 'June Pearl' in a planned breeding program in Le Grand, California, USA in 1993. The seed parent 'Red Glen' (U. S. Plant Patent 7193) is distinguished by its yellow flesh colour and the pollen parent 'June Pearl' (U. S. Plant Patent 9360) is distinguished by its 4 weeks earlier maturity than the candidate variety. Selection criteria: white flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Summer Bright' (U. S. Plant Patent 7049) and 'Ruby Diamond' (U. S. Plant Patent 7918) on the basis of similar maturity period. However, the major difference between the varieties is the new variety is white fleshed and the comparators are both yellow fleshed. The parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U.S. Plant Patent 9960. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1996	Granted	'Grand Pearl'
Chile	1998	Granted	'Grand Pearl'

First sold in the USA in Dec 1995.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'June Pearl' syn **June Ice**

Application No: 1999/076 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 52) Tree: size large, vigorous, growth spreading and dense, productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour greyish brown (61.gy.Br); lenticels numerous, colour light brown (5.4YR5.4/4.8), average size 4.8-7.9mm. Branches: size medium, texture rough and coarse; colour of 1st year wood topside light greyish red (5.3R5.9/3.5), 1st year wood underside brilliant yellow green (4.9GY8.2/9.1), older wood greyish brown (5.5YR3.5/1.8); lenticels numerous, small, colour moderate yellowish brown (9.5YR4.4/3.9), average size 1.6mm. Leaf blade: size medium, average length 131.8mm, average width 38.1mm, shape elliptical,

apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined, colour greyish red (4.0R4.4/4.8). Petiole: average length 9.5mm, average thickness 1.6mm, colour light yellow green (5.0GY8.4/5.6). Stipules: numerous, average length 6.4mm. Nectaries: 2 to 4 per leaf, alternately positioned on petiole and base of blade, size small, shape reniform, colour light greyish red (5.3R5.9/3.5). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium to late, size large, colour moderate pink (2.8R7.2/5.3). Fruit: size uniform, large for maturity time, average diameter axially 63.5mm, average transversely in suture plane 63.5mm, shape: slightly oblong, slightly variable, slightly unsymmetrical; shallow suture groove extending from the base to beyond the apex, with slight depression beyond the pistil point, deeper towards the apex. Stalk cavity: flaring, slightly elongated in suture plane, suture showing on one side, depth 9.5mm, breadth 9.5mm, base truncate, slightly oblique, apex most are depressed within the suture, some are protruding, pistil point slightly oblique. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none, colour – dark red (4.0R2.8/6.8) over entire surface with slight moderate orange yellow (8.7YR7.2/8.3) freckling near the apex. Flesh: colour white (2.5PB9.5/0.2) with virtually no bleeding at skin or pit, greenish white (10.0G9.2/0.8) near the stone, pinkish white (5.8R9.0/0.8) near the skin, surface of pit cavity moderate red (3.8R4.4/9.1) fibers, amygdalin scarce; juice abundant, rich; texture very firm, fine, crisp; fibers abundant, fine; ripens evenly, slightly earlier away from the stone; flavour sub-acidic to non-acidic and sweet, with 14 to 16 brix; aroma slight. Stone: type Clingstone, shape elliptical, base straight, apex acute, sides equal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour light yellowish brown (8.7YR6.5/5.0), tendency to split slight. Kernel: shape oval, taste bitter, viable, average width 11.1mm, average length 17.5mm, skin colour moderate reddish brown (9.0R3.4/5.2) when dry, pellicle colour greyish yellowish brown (9.5YR4.6/2.1), amygdalin abundant. . Maturity: hard ripe Dec 10, date of first picking Dec 6, date of last picking Dec 17 on trial plants. Fruit has not been observed in a wet season. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination followed by open pollination: second generation progeny of a cross between seed parent 'Bradcrim' x pollen parent 'Diamond Jewel' in a planned breeding program in Le Grand, California, USA in 1993. The second generation was developed by open-pollination using the first generation progeny as the seed parent. The seed grand parent 'Bradcrim' (U. S. Plant Patent 8461) is distinguished by 15 days earlier maturity than the candidate variety and the pollen grand parent 'Diamond Jewel' (U. S. Plant Patent 7050) is distinguished its yellow flesh colour. Selection criteria: white flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Diamond Bright' (U. S. Plant Patent 9495) and 'Spring Bright' (U. S. Plant Patent 7507) on the basis of intermediate maturity period. However, the major difference between the varieties is the new variety is white fleshed and the comparators are both yellow fleshed. The grand parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U. S. Plant Patent 9360. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Varietal Name
USA	1995	Granted	'June Pearl'
Chile	1998	Applied	'June Pearl'
South Africa	1998	Applied	'June Pearl'

First sold in the USA in Dec 1994.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'Ruby Pearl' syn **Ruby Ice**

Application No: 1999/075 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Fig 53) Tree: size medium, vigour medium, growth spreading and dense, productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour greyish brown (5.5YR3.5/1.8); lenticels numerous, colour brownish orange (4.1YR5.0/8.0), average size 3.2-9.5mm. Branches: size medium, texture rough and coarse; colour of 1st year wood topside light greyish red (5.3R5.9/3.5), 1st year wood underside brilliant yellow green (4.9GY8.2/9.1), older wood deep yellowish brown (8.8YR3.1/5.0); lenticels numerous, small, colour dark orange yellow (9.3YR6.0/7.9). average size: 0.8-1.6mm. Leaf blade: size medium, average length 139.7mm, average width 41.3mm, shape elliptical, apex acuminate, base acute, surface smooth; colour of dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0); margin finely serrated, venation pinnately net veined. Petiole: average length 15.9mm, average thickness 1.6mm, colour strong yellow green (5.4GY6.0/8.7). Stipules: numerous, average length 9.5mm. Nectaries: 2 to 4 per leaf, some oppositely and some alternately positioned on the petiole and base of blade, size medium, shape reniform, colour brilliant yellow green (4.9GY8.2/9.1). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium to late, size small, colour light purplish pink (4.6RP8.0/5.5). Fruit: size uniform, large, average diameter axially 68.3mm, average transversely in suture plane 65.1mm, shape globose, uniform, symmetrical, inconspicuous suture line toward the apex, becomes a shallow groove toward the base

and sharper near the stem, having a slight depression beyond the pistil point. Stalk cavity: flaring, circular, suture showing on one side, depth 9.5mm, breadth 19.1mm, base truncate, apex rounded to truncate, pistil point negligible in length, mostly apical and depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth, adherence to flesh strong, tendency to crack none; colour very deep red (6.5R1.7/8.4) over a moderate red (3.8R4.4/9.1) background with moderate orange (4.6YR6.5/8.2) freckling toward the apex. Flesh: colour greenish white (10.0G9.2/0.8) with some having slight moderate red (3.8R4.4/9.1) streaking very near the stone, surface of pit cavity clingstone, amygdalin wanting; juice abundant, rich; texture firm, tough, crisp; fibers abundant, fine; ripens evenly; flavour sub-acidic and sweet, with 16to18 brix, aroma.- moderate. Stone: type clingstone, shape very oval, base straight, apex acute, sides equal, surface: horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour moderate orange (4.6YR6.5/8.2) when first removed, tendency to split very slight. Kernel: shape oval, taste bitter, viable, average width 12.7mm, average length 19.1mm, skin colour pale yellow (4.7Y9.0/3.8) when first cracked, pellicle colour light greyish yellowish brown (9.7YR6.4/2.5), amygdalin abundant. Maturity: hard ripe Dec 29, date of first picking Dec 25, date of last picking Jan 8 on trial plants. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'Red Diamond' x pollen parent 'June Pearl' in a planned breeding program in Le Grand, California, USA in 1993. The seed parent 'Red Diamond' (U. S. Plant Patent 3165) is distinguished by yellow flesh colour and the pollen parent 'June Pearl' (U. S. Plant Patent 9360) is distinguished by its 2 weeks earlier maturity than the candidate variety. Selection criteria: white flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Spring Bright' (U.S. Plant Patent 7507) and 'Ruby Diamond' (U.S. Plant Patent 7918) on the basis of similar maturity period. However, the major difference between the varieties is the new variety is white fleshed and the comparators are both yellow fleshed. The parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U.S. Plant Patent 9959. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1996	Granted	'Ruby Pearl'
Chile	1998	Granted	'Ruby Pearl'

First sold in the USA in Dec 1995.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

'Spring Sweet'

Application No: 1999/077 Accepted 22 April 1999.
Applicant: **Lowell G Bradford and Norman G Bradford,** Le Grand, California, USA.
Agent: **Buchanan's Nursery,** "Monkstadt", via Tenterfield, NSW.

Characteristics (Figure 54) Tree: size large, very vigorous, growth spreading and dense, very productive, regular bearing. Trunk: size medium, texture rough and coarse, bark colour dark greyish yellowish brown (8.8YR2.5/1.6); lenticels numerous, colour dark brown (5.3YR1.6/3.4), average size 4.8mm. Branches: size medium. Texture Rough and coarse, colour of 1st year wood topside moderate purplish red (7.1RP4.5/9.0), 1st year wood underside light yellow green (5.0GY8.4/5.6), older wood moderate brown (5.6YR3.5/3.9); lenticels numerous, very small, colour dark yellowish brown (9.4YR2.3/3.3), average size 1.6-3.2mm. Leaf blade: size medium, average length 139.7mm, average width 36.5, shape elliptical, apex acuminate, base acute, surface smooth, colour dorsal surface moderate olive green (5.7GY3.6/4.8), ventral surface moderate yellow green (4.8GY6.0/5.0), margin finely serrated, venation pinnately net veined, petiole average length 12.7mm, average thickness 1.6mm, colour moderate yellow green (4.8GY6.0/5.0), stipules numerous, average length 9.5mm, glands numbers 2 to 4 per leaf, position alternately positioned on petiole and base of blade, size medium, form reniform, colour brilliant yellow green (4.9GY8.2/9.1). Flower bud: size medium, length medium, free, surface pubescent. Flower: blooming period medium, size large, colour pale purplish pink (3.7RP8.4/3.3). Fruit: size uniform, medium, average diameter axially 66.7mm, average transversely in suture plane 63.5mm, shape uniform, globose, slightly asymmetrical, slightly truncate at the base shallow suture groove extending from the base to beyond the apex, having a slight depression beyond the pistil point. Stalk cavity: flaring, somewhat elongated in the suture plane, suture showing on one side, stem markings typical, depth 11.1mm, breadth 15.9mm, base rounded to somewhat truncate, apex rounded, pistil point apical, with most depressed within the suture. Stalk: medium, average length 9.5mm, average width 4.8mm. Skin: thickness medium, texture smooth. adherence to flesh strong, tendency to crack none, colour very deep red (6.5R1.7/8.4) over a dark reddish orange (0.3R4.0/9.1) background with some strong orange yellow (9.1YR7.1/11.6) freckling toward the apex. Flesh: colour brilliant yellow (4.4Y8.7/8.9) to the pit, with virtually no red at the stone, amygdalin scarce; juice abundant, rich; texture firm, crisp; fibers abundant, fine, ripens evenly, flavour sub-acidic and sweet with 15 brix, aroma moderate. Stone: type clingstone, shape oval, base straight, apex acute, sides equal, surface horizontally furrowed toward the apex and some pitting toward the base, ridges jagged toward the base, colour

moderate orange (4.6YR6.5/8.2) when first removed, light brown (5.4YR5.4/4.8) internally, tendency to split very slight. Kernel: shape oval, taste bitter, viable, average width 12.7mm, average length 19.1mm, skin colour pale yellow (4.7Y9.0/3.8) when first cracked, pellicle colour brownish orange (4.1YR5.0/8.0), amygdalin abundant. Maturity: hard ripe Dec 18, date of first picking Dec 12, date of last picking Dec 26 on trial plants. (Note: all colour designations are ISCC-NBS colour codes and Munsell renotations.)

Origin and Breeding Controlled pollination: first generation progeny of a cross between seed parent 'Kay Diamond' x pollen parent 'June Pearl' in a planned breeding program in Le Grand, California, USA in 1993. The seed parent 'Kay Diamond' (U.S. Plant Patent 8923) is distinguished by its freestone and the pollen parent 'June Pearl' (U.S. Plant Patent 9360) is distinguished by its white flesh colour. Selection criteria: yellow flesh colour and non-acidic flavour. Propagation: by budding and grafting. After each propagation cycle the variety has been true to type and stable. Breeder: Lowell G Bradford and Norman G Bradford, Le Grand, California, USA.

Choice of Comparators The two comparators that have been selected are 'Spring Bright' (U. S. Plant Patent 7507) and 'Diamond Bright' (U. S. Plant Patent 9495) on the basis of similar maturity period. However, the major difference between the varieties is the new variety is subacid in flavour and the comparators are both acidic in flavour. The parents are excluded for reasons stated above.

Comparative Trial The description is based on overseas data gathered from U.S. Plant Patent 9962. The characteristics were verified under Australian conditions. The trial trees are planted at Buchanan's Nursery Tenterfield, NSW. They have been observed for the past two years. From all of the observations the variety is performing the same in Australia as it does in the USA. It has proven to be distinct, uniform and stable through several propagation cycles.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1996	Granted	'Spring Sweet'
Chile	1998	Granted	'Spring Sweet'

First sold in the USA in Dec 1995.

Description: **Peter Buchanan,** Buchanan's Nursery, Tenterfield, NSW.

Prunus salicina
Japanese Plum

'Primetime'

Application No: 1994/002 Accepted: 12 Jan 1994.
Applicant: **Eric Wuhl,** Fresno, California, USA.
Agent: **Fleming's Nurseries & Associates Pty Ltd,** Monbulk, VIC.

Characteristics (Figure 47) Tree: size medium, vigour moderate, habit upright, productivity high. Trunk: size medium, surface texture rough with epidermal cells peeling off in a regular pattern. Branches: size medium to large, habit upright, density open and sprawling developing whips. Leaf: size large, mean length 100.6mm, mean width 49.6mm, shape ranges from lanceolate to ovate to obovate, base acute, apex acuminate, marginal form mostly serrulate some leaves show a fine serrate margin, nectary shape globose, petiole size small to medium. Flower: bud size small, bud shape conic, petal colour white (RHS 155D), petal size approximately 20mm, semi-self fruitful. Fruit: size very large, mean diameter in axial plane 66.8mm, mean diameter transverse in suture plane 63.5mm, form cordate with a slightly pointed tip, symmetrical, stalk length medium-short, skin colour mature fruit show a slight reddish colour but fully mature (ripe) show a very dark eggplant colour (RHS 187A), flesh colour a mixture of yellow and red, most of flesh is translucent light yellowish red with red/pink veins or vascular strands that diffuse throughout the flesh, flavour sweet with good balance between sugar and acid, texture firm crisp. Stone: type clingstone, size medium, form generally oblong, apex shape pointed acute, base shape flat narrow, tendency to split none. Other: keeping quality very firm after two weeks storage. Tolerates heat well with no signs of sunburn.

Origin and Breeding Open pollination followed by seedling selection: originated as one of thirty-five seedlings growing in applicant's Fresno orchard in 1985 between plantings of varieties 'Challenger' and 'Showtime'. It is believed that the seedling is an open-pollinated hybrid between 'Challenger' and 'Showtime' as the new variety expresses some traits of both varieties and some expressions, which are intermediate between two. The new variety 'Primetime' was asexually reproduced in 1987 by budding onto "Nemaguard" rootstock to cofirm stability. Selection criteria: very firm, uniformly large fruit with a sweet flavour and exceptional keeping quality. Propagation: budding or grafting onto plum rootstock. Breeder: Mr. Eric Wuhl, Fresno, California, USA.

Choice of Comparators 'Showtime' and 'Friar' are the most similar varieties of common knowledge in terms of maturity. 'Showtime' is also a possible parent of the candidate variety. These varieties differ from the candidate variety as: 'Showtime' is freestone with a round to flat-round fruit shape. 'Friar' is semi-freestone with a flat fruit shape compared to candidate's clingstone with cordate shaped fruit. Another variety 'Eldorado' is remotely similar to the candidate variety, but from which it is distinguished by producing uniformly larger fruit of a heart-shaped form having a distinct flavour.

Comparative Trial The information contained herein is based on overseas data sourced from United States Plant Patent Number 9,022 dated Dec 27 1994. The trial was conducted near Fresno in the central portion of the San Joaquin valley in California, USA. The overseas data was verified under Australian growing conditions where possible.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
USA	1994	Granted	'Primetime'
EU	1997	Applied	'Primetime'

First sold in the USA in Jan 1995. First Australian sale Jul 1998.

Description: **Zoee Maddox.** Fleming's Nurseries Pty Ltd, Monbulk, VIC.

Pyrus communis
European Pear

'Sophia's Gold'

Application No: 1995/161 Accepted: 13 Jun 1995.
Applicant: **Victor John Stasey,** Stanhope, VIC.

Characteristics (Table 39, Figure 41) Plant: habit erect, vigour strong. One year old shoots: colour brown, lenticels few, shoot internode length medium. Shape of vegetative bud: acute. Leaf: length medium (average 73.3mm), width broad (average 46.6mm), margin indentation slightly serrate, shape of upper blade obtuse, shape of base obtuse, curvature of midrib weak. Petiole: length medium/long (average 23.6mm), stipules absent. Fruit: size large, length long (average 96.9mm), width very broad (average 90.6mm), shape convex, russet very slight/absent, stalk length medium (average 30.5mm), stalk thickness broad (average 4.5mm), curvature of stalk weak, fruit ground colour at harvest maturity RHS 145A, overcolour absent, margin of eye basin slightly ribbed, eye basin depth medium (average 12.7mm), eye basin width medium (average 29.6mm). Seeds: egg-shaped. Season of maturity: late season (April 1st, Stanhope, Victoria).

Origin and Breeding Open-pollinated seedling selection: one seedling was observed growing in a block of 'William Bon Chretien' pears in 1990, which produced large fruit with green skin colour and convex shape. Other varieties growing on this orchard were 'Packham Triumph', 'Burre Bosc' and 'Josephine de Malines'. Cuttings were taken and grafts made prior to establishing the growing trial, with three replicates, in 1994. A further two replicates were planted in the following year. Selection criteria: Fruit size, fruit flavour. Propagation: vegetative by budwood. 'Sophia's Gold' will be commercially propagated by vegetative cuttings from the stock plants. Breeder: Victor John Stasey, Stanhope, VIC.

Choice of Comparators 'Packham Triumph' was chosen as a comparator because it exhibits similar fruit characteristics in terms of fruit finish and skin colour and has a maturity time closer to 'Sophia's Gold' than other possible parents and was growing in the same orchard. 'Josephine de Malines' was selected since it is the most commonly grown commercial variety, with similar fruit characteristics and maturity time. 'William Bon Chretian' was excluded as a comparator because of its very early maturity time (around February 1st). 'Burre Bosc' was excluded on the basis of fruit shape (ie high length breadth ratio and concave shape) and fruit finish (heavy russet). No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Stanhope, VIC, 1994-2000. Conditions: 40 year old *Pyrus calleryana* (D6) planted in a 6 metre x 6 metre configuration had scions of each comparitor grafted in 1994. Twelve grafts were made per tree. One variety was grafted per tree in a randomised complete block design of five replicates. The trees were maintained under normal commercial practice. Pest and disease treatments applied as required. Trial design: randomised complete block. Measurements taken from five trees with 100 measurements per variety.

Prior Applications and Sales Nil.

Description: **Leslie Mitchell,** Agrisearch Services Pty Ltd, Shepparton, VIC

Table 39 *Pyrus* varieties

	'Sophia's Gold'	'Packham Truimph'	'Josephine de Malines'
WATER SHOOT COLOUR			
	brown	brown	light brown
SHAPE OF VEGETATIVE BUD			
	acute	squat	slightly elongated
LEAF BLADE ATTITUDE TO STEM			
	upwards	slightly upwards	horizontal
LEAF BLADE BREADTH (mm) Mid season			
mean	46.59	40.69	41.19
std deviation	3.56	1.27	2.88
LSD/sig	5.82	P≤0.01	ns
LEAF BLADE INDENTATION OF MARGIN			
	slightly serrate	serrate	slightly serrate
LEAF BLADE SHAPE OF UPPER BLADE			
	obtuse	acute	obtuse
LEAF BLADE SHAPE OF LEAF BASE			
	obtuse	flat	obtuse
CURVATURE OF MIDRIB			
	weak	strong	weak
LEAF STIPULE			
	absent	present	present
PETIOLE LENGTH (mm), Mid season			
mean	23.62	18.95	19.38
std deviation	1.13	0.15	0.98
LSD/sig	1.85	P≤0.01	P≤0.01
FRUIT LENGTH (mm), at maturity			
mean	96.89	91.53	80.40
std deviation	3.19	1.87	1.74
LSD/sig	5.01	P≤0.01	P≤0.01
FRUIT BREADTH (mm), at maturity			
mean	90.64	79.13	87.20
std deviation	3.71	2.27	1.91
LSD/sig	5.82	P≤0.01	ns
FRUIT LENGTH/BREADTH RATIO, at maturity			
mean	1.07	1.16	0.92
std deviation	0.03	0.04	0.02
LSD/sig	0.06	P≤0.01	P≤0.01
FRUIT GROUND COLOUR (Harvest maturity)			
	145A	145A	145B
FRUIT RUSSETT AROUND STALK (Harvest maturity)			
	slight/absent	medium	slight/medium

FRUIT RUSSETT AROUND EYE BASIN (Harvest maturity)			
	slight/absent	medium	slight
FRUIT STEM LENGTH (mm), (Harvest maturity)			
mean	30.52	36.86	24.47
std deviation	2.60	2.21	3.26
LSD/sig	5.78	P≤0.01	P≤0.01
FRUIT STEM THICKNESS (mm), (Harvest maturity)			
mean	4.47	3.76	4.27
std deviation	0.22	0.17	0.23
LSD/sig	0.44	P≤0.01	ns
FRUIT CURVATURE OF STALK, (Harvest maturity)			
	weak	medium	absent
FRUIT MARGIN OF EYE BASIN, (Harvest maturity)			
	slightly ribbed	very slightly ribbed	even
FRUIT EYE BASIN DEPTH (mm), (Harvest maturity)			
mean	12.69	11.34	9.44
std deviation	0.57	1.04	1.13
LSD/sig	2.01	ns	P≤0.01
FRUIT EYE BASIN WIDTH (mm), (Harvest maturity)			
mean	29.55	24.19	32.52
std deviation	2.92	1.32	1.29
LSD/sig	4.23	P≤0.01	ns
SEASON OF MATURITY, Harvest Date (Stanhope, VIC)			
	Apr 1st	Feb 25th	Apr 1st

Pyrus communis
Pear Rootstock

'BM 2000'

Application No: 1998/128. Accepted: 10 Jul 1998.
Applicant: **Bruce Manchester,** Orange, NSW.

Characteristics (Table 40 Figure 42) Plant: medium vigour, drooping habit, few shoots with wavy growth. Young shoot: weak anthocyanin colouration of tip, weak pubescence. Dormant shoot: weak branching, thorns absent, medium–long, medium glossiness of bark, long-medium internodes, many medium-small lenticels, bark grey-brown, medium size vegetative bud with acute apex markedly held out on medium sized bud support. Leaf: outwards attitude, medium length, broad, weakly concave cross-section profile, obtuse/truncate base, obtuse apex, short tip, margin serrate, strong longitudinal curvature, main vein lighter colour than upper leaf blade, medium length stipules sometimes present. Time of beginning bud burst: medium (21 Sep in Orange, NSW).

Origin and Breeding Open pollination: originated as an open-pollinated seedling of likely parents 'William Bon Chretien' and 'Packham Triumph'. The seedling is distinguishable from probable parents by drooping growth habit, broad leaf (small length: width ratio), weakly concave leaf in cross-section profile with obtuse apex and short petiole. Selection criteria: initial observations of parent tree 1986-88 showed medium size and vigour, seedlings propagated and grafted with three European pear varieties and two nashi (Japanese) varieties in 1990 and observed for growth, compatibility, precocity and fruit quality. Propagation: 'BM 2000' will be commercially propagated by tissue culture. Breeder: Bruce Manchester, Orange, NSW.

Choice of Comparators 'William Bon Chretien' is similar in appearance and is one of the likely parents. 'BP 1' is similar in appearance and is a recently introduced pear rootstock that is used in other countries. 'D6' is dissimilar in appearance but was included because it has been a commonly used pear rootstock in Australia. 'Packham Triumph' was not selected for reasons stated above.

Comparative Trial Location: Orange NSW, planted spring 1998. Conditions: open-ground nursery planting, spacing 3.5m by 1m, all varieties except 'D6' propagated by grafting onto 'D6' seedling rootstock and planted as dormant grafts, 'D6' propagated by seed. Micro-jet irrigation with weed control by knockdown herbicide as required. Trial design: randomised block design, five plants per plot, five replicates. Measurements/observations: from a minimum 10 random plants or parts taken from each of minimum 10 random plants.

Prior Applications and Sales Nil.

Description: **Bruce Valentine,** Valentine Horticultural Services, Orange, NSW.

Table 40 *Pyrus* varieties

	'BM 2000'	***'D6'**	***'William Bon Chretien'**	***'BP 1'**
PLANT VIGOUR	medium	strong	medium-strong	medium-strong
SHOOT HABIT	drooping	spreading	upright	upright
SHOOT GROWTH	wavy	wavy	wavy	straight
SHOOT BRANCHING	weak	strong	weak	weak
LENTICEL NUMBER	many	few	medium	medium
LENTICEL SIZE	medium-small	small	medium-small	medium
LENTICEL SHAPE	circular	broad elliptic	elliptic	circular
LEAF BLADE LENGTH (mm)				
mean	58.6	56.2	74.9	75.8
std deviation	5.36	7.08	6.44	6.57
LSD/sig	4.75	ns	P≤0.01	P≤0.01
LEAF BLADE WIDTH (mm)				
mean	45.8	36.8	44.5	48.8

Table 40 continued

std deviation	3.81	4.95	5.29	4.06
LSD/sig	3.40	P≤0.01	ns	ns
LEAF LENGTH: WIDTH RATIO				
mean	1.29	1.55	1.70	1.56
std deviation	0.138	0.225	0.182	0.104
LSD/sig	0.126	P≤0.01	P≤0.01	P≤0.01
LEAF CROSS-SECTION PROFILE				
	weakly concave	deeply concave	deeply concave	deeply concave
LEAF BLADE MARGIN				
	serrate	sharp crenate	serrate	sharp crenate
LEAF MAIN VEIN COLOUR COMPARED WITH UPPER BLADE				
	lighter	lighter	lighter	lighter
PETIOLE LENGTH (mm)				
mean	11.7	12.6	18.7	18.9
std deviation	0.66	0.75	0.51	0.37
LSD/sig	1.52	ns	P≤0.01	P≤0.01
TIME OF BEGINNING BUD BURST				
	21/9	15/8	26/9	15/9

Rhododendron simsii
Azalea

'Bina'

Application No: 2000/169 Accepted 7 Jun 2000.
Applicant: **Karl Glaser,** Babenhausen, Germany.
Agent: **Rodger Max Davidson,** Galston, NSW.

Characteristics (Table 41, Figure 17) Plant: habit wide, bushy. Leaf: young leaf colour of upper side light green, mature leaf; length long (mean 6.42mm), width medium to broad (mean 2.33cm), shape slightly obovate to strongly obovate, colour of upper side dark green, colour of lower side light green, shape of apex mucronate. Inflorescence: number of flowers medium, pedicel length medium, calyx present, formation of a corolla form absent or very weak. Flower: diameter large (mean 7.62 cm), shape open funnel-shaped, fragrance absent or very weak, type of corolla double, number of petals many, corolla lobe; colour of margin and middle of upper side white (RHS 155C), colour of middle of lower side white (RHS 155C), undulation of margin medium, flower throat conspicuousness of markings absent or very weak, colour compared to colour of middle of upper side same colour, anther colour brown, pistil length in comparison to stamens longer. Time of flowering very early. (Note: data in parenthesis based on local measurements and observations. All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Spontaneous mutation: from 'Kosmos', which is characterised by purple-red (RHS 57B) colour of middle of upper side of corolla lobe. Selection criteria: flower colour. Propagation: vegetative propagation each year since 1994. Breeder: Karl Glaser, Babenhausen, Germany.

Choice of Comparators The parental variety 'Kosmos' was not chosen as a comparator as the flower colour is purple-red. 'Princess Sharon'(Ф) was selected as it shows similar flower characteristics. 'Madonna' was also selected as it has similar flower colour and size to 'Bina'. 'Aline' was initially selected but later was excluded because it has smaller flower size and weak undulation of the corolla lobe compared to the candidate variety.

Comparative Trial The information is based on the official Bundessortenamt UPOV variety description (RDG 166). The characteristics of the candidate variety were verified by local observation in Davidson's Nurseries, Galston, NSW. The key characteristics of the comparators by which they differ from the candidate variety were also recorded in the local observation.

Prior Application and Sales

Country	Year	Current Status	Name Applied
Germany	1997	Granted	'Bina'

First sold in Germany in Jun 1999.

Description: **Mike Barrett,** Beecroft, NSW.

Table 41 *Rhododendron* varieties

	'Bina'	*'Princess Sharon'(Ф)	*'Madonna'
FLOWER: DIAMETER	large	medium	large
COROLLA LOBE: UNDULATION OF MARGIN	medium	weak	medium
FLOWER THROAT: CONSPICUOUSNESS OF MARKINGS	absent	medium	medium-strong
FLOWER THROAT: COLOUR COMPARED TO COLOUR OF MIDDLE OF UPPER SIDE OF COROLLA LOBE	same colour	darker (RHS 145 D)	same colour
ANTHER: COLOUR	brown	yellow	cream

'Jory'

Application No: 2000/170 Accepted: 8 Jun 2000.
Applicant: **Karl Glaser,** Babenhausen, Germany.
Agent: **Rodger Max Davidson,** Galston, NSW.

Characteristics (Table 42, Figure 19) Plant: habit upright, bushy. Leaf: young leaf light green, mature leaf; length long to very long (mean 6.24mm), width very broad (mean 2.76mm), shape elliptic, upper side dark green, lower side medium green, shape of apex mucronate. Inflorescence: number of flowers few, pedicel length long, calyx present, formation of corolla form absent or very weak. Flower: diameter large to very large (medium mean 67.5mm), shape wide funnel-shaped, fragrance absent or very weak, type of corolla double, number of petals few to medium, corolla lobe; colour of margin of upper side red (RHS 47B), colour

of middle of upper and lower sides red-pink (RHS 47D), undulation of margin absent or very weak, flower throat; conspicuousness of markings absent or very weak, colour compared to colour of middle of upper side of corolla lobe lighter, anther and pistil absent. Time of flowering early to medium. (Note: data in parenthesis based on local measurements and observations. All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Spontaneous mutation: from 'Melodie'(Þ, which is characterised by white (RHS 155D) margin of upper side of corolla lobe and red pink (RHS 48C) middle of upper side of corolla lobe. Selection criteria: flower colour. Propagation: vegetative propagation each year since 1994. Breeder: Karl Glaser, Babenhausen, Germany.

Choice of Comparators The parental variety 'Melodie'(Þ was not suitable as a comparator as the colour of the margin of the upper side of corolla lobe is white (RHS 155D). 'Ganda Red' and 'Coral Wings' were selected as the most similar varieties on the basis of flower colour and shape.

Comparative Trial The information is based on the official Bundessortenamt UPOV variety description (RDG 164). The characteristics of the candidate variety were verified by local observation in Davidson's Nurseries, Galston, NSW. The key characteristics of the comparators by which they differ from the candidate variety were also recorded in the local observation.

Prior Application and Sales

Country	Year	Current Status	Name Applied
Germany	1997	Granted	'Jory'

First sold in Germany in Jun 1999.

Description: **Mike Barrett,** Beecroft, NSW.

Table 42 *Rhododendron* varieties

	'Jory'	*'Ganda Red'	*'Coral Wings'
CALYX: FORMATION OF A COROLLA FORM	absent	absent	medium
FLOWER: DIAMETER	medium	large	large
FLOWER: TYPE OF COROLLA	double	double	single
COROLLA LOBE: COLOUR OF MARGIN OF UPPER SIDE (RHS, 1995)	47B	44C	47D
FLOWER THROAT: CONSPICUOUSNESS OF MARKINGS	absent	medium-strong	very strong
FLOWER THROAT: TYPE OF MARKINGS	absent	spots not touching each other	spots touching each other

'Meggy'

Application No: 2000/171 Accepted: 19 Jul 2000.
Applicant: **Karl Glaser,** Babenhausen, Germany.
Agent: **Rodger Max Davidson,** Galston, NSW.

Characteristics (Table 43, Figure 18) Plant: habit upright, bushy. Leaf: young leaf colour of upper side medium green, mature leaf; length long (mean 6.25cm), width medium to broad (mean 2.81cm), shape slightly obovate, upper side dark green, lower side medium green, shape of apex mucronate. Inflorescence: number of flowers medium to many, pedicel length long, calyx present, formation of a corolla form absent or very weak. Flower: diameter large (mean 7.53cm), shape wide funnel-shaped, fragrance absent or very weak, type of corolla double, number of petals many, corolla lobe colour of margin of upper side purple (RHS 67A) to blue-pink (RHS 68B), colour of middle of upper and lower sides blue-pink (RHS 68A-68B), corolla lobe undulation of margin very strong, throat conspicuousness of markings weak, type of markings spots not touching each other, colour of markings purple-red (RHS 57B), throat colour compared to colour of middle of upper side of corolla lobe same colour. Time of flowering very early. (Note: data in parenthesis based on local measurements and observations. All RHS colour chart numbers refer to 1995 edition.)

Origin and Breeding Controlled pollination: of two unnamed seedlings in a planned breeding program. The seedlings are proprietary breeding lines within the breeder's private collection. Selection criteria: double flowers. Propagation: seed sown and germinated 1988, variety selected and vegetatively propagated since 1991. Breeder: Karl Glaser, Babenhausen, Germany.

Choice of Comparators 'Kosmos' and 'Princess Barbara'(Þ were selected as the most similar varieties on the basis of flower colour and size.

Comparative Trial The information is based on the official Bundessortenamt UPOV variety description (RDG 173). The characteristics of the candidate variety were verified by local observation in Davidson's Nurseries, Galston, NSW. The key characteristics of the comparators by which they differ from the candidate variety were also recorded in the local observation.

Prior Application and Sales

Country	Year	Current Status	Name Applied
Germany	1997	Granted	'Meggy'

First sold in Germany in 1999.

Description: **Mike Barrett,** Beecroft, NSW.

Table 43 *Rhododendron* varieties

	'Meggy'	'Kosmos'	'Princess Barbara'(Þ
COROLLA LOBE: COLOUR OF MARGIN OF UPPER SIDE (RHS, 1995)	67A-68B	57B	67D

Table 43 Continued

COROLLA LOBE: COLOUR OF MIDDLE OF UPPER SIDE (RHS, 1995)			
	68A-68B	57C	67C
COROLLA LOBE; COLOUR OF MIDDLE OF LOWER SIDE (RHS, 1995)			
	68A-68B	57C	67C
COROLLA LOBE; UNDULATION OF MARGIN			
	very strong	medium	very weak

Rosa hybrid
Rose

'Dictator' syn **Pure Bliss**

Application No. 1999/071 Accepted: 22 Apr 1999.
Applicant: **Dickson Nurseries Ltd**, Newtownards, Northern Ireland, UK.
Agent: **Grandiflora Nurseries Pty Ltd,** Cranbourne, VIC.

Characteristics (Table 44, Figure 8) Plant: habit narrow bushy, width medium. Young vegetative Shoot: anthocyanin colouration medium, reddish brown to purple. Stem thorns: present, lower surface concave. Leaves: size medium, medium green, glossiness of upper side strong. Terminal leaflet: size medium, cross section flat, margin undulation absent or very weak, leaf base rounded. Flower pedicel: few prickles. Flower bud profile: ovate. Flower: size large, double, upper profile irregular round, lower profile flattened convex, sepal extensions weak, fragrance medium. Petals: size medium, red purple colour group; midzone inside RHS 62D, margin inside RHS 62C, midzone outside 55A, margin outside 55D; basal spot present on both sides; size medium, colour RHS 2A; margin reflexing strong, undulation weak, stamen filament yellow. Seed vessel: small, pitcher shaped. (Note: all RHS colour chart numbers refer to 1986 edition.)

Origin and Breeding Controlled Pollination: seed parent 'Dicjana' x pollen parent 'unnamed seedling' in a planned breeding program in 1986. The seed parent is bred by the same breeder, which is characterised by deep cream flowers with weak fragrance. The pollen parent is a proprietary breeding stock plant within the breeder's private collection. Selection criteria: from this cross, 'Dictator' was selected for development on the basis of compact growth habit and colour. Propagation: vegetative through many generations. Breeder: Dickson Nurseries Ltd, Newtownards, Northern Ireland, UK.

Choice of Comparator 'Sonia' syn Sweet Promise was chosen as the sole comparator as it is in the opinion of the qualified person the most similar cut flower variety of common knowledge and is a back parent of the pollen parent. The parental varieties were not considered as comparators for reasons outlined above.

Comparative Trial Location: conducted at Cranbourne, VIC between Jan-Jul 2000. Conditions: plants grown in pots of scoria within environmentally controlled glasshouse. Trial design: completely randomised. Measurements: 20 random samples of each variety collected over a five- month period.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
UK	1993	Granted	'Dictator'

First sold in UK in Nov 1995.

Description: **Phil Elliott,** Grandiflora Nurseries Pty Ltd, Cranbourne, VIC.

Table 44 *Rosa* varieties

	'Dictator'	***'Sonia'** syn **Sweet Promise**
YOUNG SHOOT: ANTHOCYANIN COLOURATION	weak	strong
YOUNG SHOOT: HUE OF ANTHOCYANIN COLOURATION	reddish brown to purple	reddish brown
THORN LENGTH (mm)		
mean	4	7
std deviation	1.14	1.24
LSD/sig	0.91	P≤0.01
LEAF COLOUR	medium	dark
TERMINAL LEAFLET LENGTH (mm)		
mean	49	66.5
std deviation	8.78	7.56
LSD/sig	6.29	P≤0.01
TERMINAL LEAFLET WIDTH (mm)		
mean	36	46
std deviation	4.22	5.06
LSD/sig	3.57	P≤0.01
NUMBER OF PETALS		
mean	45	28.5
std deviation	4.53	3.42
LSD/sig	3.08	P≤0.01
FLOWER SIZE		
mean	117	107
std deviation	4.53	12.16
LSD/sig	3.08	P≤0.01
PETAL COLOUR (RHS, 1986)		
midzone outside	55A	49A
midzone inside	62D	38A
margin outside	55D	48C
margin inside	62C	38B
BASAL SPOT COLOUR (RHS, 1986)	2A	6D

'Meideauri'

Application No: 1997/083 Accepted: 5 Nov 1997.
Applicant: **Meilland International,** Le Cannet des Maures, France.
Agent: **Kim Syrus,** Melrose Park, SA.

Characteristics (Figure 6) Plant: growth habit broad and bushy, height medium, width medium. Stem: anthocyanin

medium, anthocyanin hue bronze, prickles present, prickle shape of lower side concave. Leaf: size small, glossiness of upper side strong. Terminal leaflet: length short (av. 40.28mm), width narrow (av. 27.53mm). Flower: colour group pink, type double, diameter medium (av. 76.15mm), almost continuous flowering, Petal: size small medium, colour of middle zone inner side RHS 55C-D (RHS 62A-B), marginal zone inner side RHS 55C-D (RHS 62A-B), middle zone outer side RHS 57D, marginal zone outer side RHS 57D. Basal spot: inner side; present, very small, colour RHS 158D (RHS 1D), outer side; present, very small, colour RHS 158D (RHS 1D), Seed: vessel size medium, vessel shape pitcher. Flowering: almost continuous. (Note: data in parenthesis are from local observations. All RHS colour chart numbers in local observation refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent 'Sommerwind' x pollen parent ('Milrose' x 'Rosamunde'). The seed parent is characterised by broad bushy growth, light pink blooms, mild fragrance and repeat flowering. The pollen parent is characterised by broad bushy growth, double blooms, glossy deep green foliage and repeat flowering. Hybridisation took place in Le Cannet des Maures, France in 1992. From this cross seedling number 92-2637-02 was chosen in 1993 on the basis of flower type. Selection criteria: double flower type, broad bushy habit, dark leaf colour and glossy leaf upper side, Propagation: 20 plants were grafted through conventional T- budding method onto virus indexed indica major rootstock, all plants were found to be uniform and stable. 'Meideauri' will be commercially propagated by both budded and vegetative cutting methods. Breeder: Alain Meilland, Le Cannet des Maures, France.

Choice of Comparators The qualified person considers 'Mary Rose' to be the closest known variety of common knowledge. However, this variety differs significantly from 'Meideauri' by being less broad and bushy, having larger terminal leaf length and width and less glossy on the leaf upper side.

Comparative Trial Description based on official overseas test report obtained from Geves, Sophia –Antipolis, France (Test Report No. 12306). The overseas test report was confirmed by observations made on locally grown material in Myponga, SA. The data from the local observation is shown in parenthesis in the Characteristics section.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
France	1993	Surrendered	'Meideauri'
Switzerland	1993	Granted	'Meideauri'
UK	1994	Withdrawn	'Meideauri'
Italy	1994	Granted	'Meideauri'
EU	1995	Granted	'Meideauri'
Poland	1995	Applied	'Meideauri'
USA	1996	Granted	'Meideauri'
Argentina	1997	Granted	'Meideauri'
New Zealand	1999	Applied	'Meideauri'

First sold in France in May 1993. First Australian sale 2000.

Description**: Kim Syrus,** Melrose Park, SA.

'Meiroupis'

Application No: 1997/081 Accepted: 5 Nov 1997.
Applicant: **Meilland International,** Le Cannet des Maures, France.
Agent: **Kim Syrus,** Melrose Park, SA.

Characteristics (Figure 7) Plant: growth habit climbing. Stem: anthocyanin medium, anthocyanin hue bronze to reddish brown, prickles present, prickle shape of lower side concave. Leaf: size medium, glossiness of upper side medium. Terminal leaflet: length medium (av. 42.31mm), width narrow (av. 22.18mm). Flower: colour group apricot blend, type double, diameter medium (av. 76.29mm), almost continuous flowering, Petal: size medium, colour of middle zone inner side RHS 35D (RHS 25C), marginal zone inner side RHS 35D (RHS 36D), middle zone outer side RHS 29C, (RHS 25C) marginal zone outer side RHS 35D (RHS 36C-D). Basal spot: inner side; present, small, colour RHS 4D (RHS 5A), outer side; present, medium, colour RHS 8B (RHS 5D), Seed: vessel size medium, vessel shape pitcher. Flowering: almost continuous. (Note: data in parenthesis are from local observations. All RHS colour chart numbers in local observation refers to 1995 edition.)

Origin and Breeding Controlled pollination: seed parent ('Meibeluxen' x 'Friesia') x pollen parent 'Prairie Princess'. The seed parent is characterised by broad bushy growth, light pink blooms, medium fragrance and repeat flowering. The pollen parent is characterised by upright bushy growth, semi double coral pink blooms, deep green foliage and repeat flowering. Hybridisation took place in Le Cannet des Maures, France in 1992. From this cross seedling number 92-5786-04 was chosen in 1993 on the basis of growth habit and flower type. Selection criteria: double flower type and climbing habit. Propagation: 20 plants were grafted through conventional T- budding method onto virus indexed indica major rootstock, all plants were found to be uniform and stable. 'Meiroupis' will be commercially propagated by both budded and vegetative cutting methods. Breeder: Alain Meilland, Le Cannet des Maures, France.

Choice of Comparators The qualified person considers 'Auscot'(Þ syn Abraham Derby(Þ to be the closest known variety of common knowledge. However, this variety differs significantly from 'Meiroupis' by being less broad and bushy, larger diameter flower and having larger terminal leaf length and width.

Comparative Trial Description based on official overseas test report obtained from Hannover, Germany (Test Report No. ROS 1144). The overseas test report was confirmed by observations made on locally grown material in Myponga, SA. The data from the local observation is shown in parenthesis in the Characteristics section.

Prior Applications and Sales

Country	Year	Current Status	Name Applied
Germany	1993	Surrendered	'Meiroupis'
France	1994	Surrendered	'Meiroupis'
UK	1994	Surrendered	'Meiroupis'
EU	1995	Granted	'Meiroupis'
Switzerland	1995	Granted	'Meiroupis'
USA	1996	Granted	'Meiroupis'
Argentina	1997	Granted	'Meiroupis'

First sold in Germany in May 1993. No prior Australian sale.

Description**: Kim Syrus,** Melrose Park, SA.

Schlumbergera truncata
Zygocactus

'Sunburst Fantasy'

Application No: 1999/104 Accepted: 22 Apr 1999.
Applicant: **B.L. Cobia, Inc.,** Winter Garden, Florida, USA.
Agent: **Brindley's Nurseries,** Coffs Harbour, NSW.

Characteristics (Table 45, Figure 21) Plant: semi-erect. Phylloclade: broad and long with red tinge to an otherwise green phylloclade. Flower: sterile, sessile, red (RHS 44A) in colour, long stamen, purple stigma and ovary with a purplish tinge.

Origin and Breeding Spontaneous mutation: a mutated branch of phylloclades was observed and selected in a stock bed of thousands of 'Twilight Tangerine' plants at applicant's nursery in 1995. 'Twilight Tangerine' was characterised by shorter and narrower phylloclades, shorter width flowers, orange-red (RHS 41B) flower colour with shorter stamen and a pink stigma. The mutant was characterised by deeper red (RHS 44A) flower colour. Selection criteria: semi-erect growth habit, red buds, purple stigma, red flower colour. Propagation: vegetative through several generations in USA and Australia. Breeder: B.L. Cobia, Winter Garden, Florida, USA.

Choice of Comparators 'Twilight Tangerine' was chosen because it is the original source material from which the candidate variety was selected. 'Sleigh Bells'ϕ and 'Orange Fantasy' were initially considered, however they were excluded from the trial because 'Sleigh Bells' has larger flowers, with larger phylloclades while 'Orange Fantasy' has broader flowers without red buds with a later flowering time along with a more pendulous growth habit. No other similar varieties of common knowledge have been identified.

Comparative Trial Location: Coffs Harbour, NSW, Sep 1999 – Jun 2000. Conditions: plants raised in peat/polystryrene/sand mixture in 75mm pots under fibreglass and watered as required, nutrition maintained with slow release fertiliser and regular liquid fertiliser applications through the growing period, pest and disease treatments applied as required. Trial design 20 un-replicated plants grown in random in a commercial greenhouse. Measurements: taken from 10 specimens taken at random from 20 plants.

Prior Applications and Sales

No prior applications. First sold in Australia in May 1999.

Description: **Anthony Brindley,** Coffs Harbour, NSW.

Table 45 *Schlumbergera* varieties

	'Sunburst Fantasy'	***'Twilight Tangerine'**
PHYLLOCLADE LENGTH 2nd ORDER (mm)		
mean	43.7	40.9
std deviation	2.21	2.81
LSD/sig	2.52	P≤0.01
PHYLLOCLADE WIDTH 2nd ORDER (mm)		
mean	33.3	28.5
std deviation	2.79	3.06
LSD/sig	3.18	P≤0.01
BUD: COLOUR OF TIP	red	tangerine
FLOWER WIDTH (mm)		
mean	57.6	55.1
std deviation	2.12	4.46
LSD/sig	2.42	P≤0.01
COROLLA LOBE: COLOUR OF MIDZONE (RHS)	44A	41B
COROLLA LOBE: BORDER BETWEEN ZONES	sharp	diffuse
COROLLA LOBE: COLOUR OF MARGINAL ZONE (RHS)	44A	41B
STAMEN: LENGTH BEYOND MOUTH (mm)		
mean	26.3	24.0
std deviation	1.83	1.83
LSD/sig	2.09	P≤0.01
STIGMA COLOUR	purple	pink
OVARY COLOUR	pale green with reddish tinge	pale green

'White Fantasy'

Application No: 1998/088 Accepted: 23 Apr 1998.
Applicant: **Brindley's Nurseries,** Coffs Harbour, NSW.

Characteristics (Table 46, Figure 22) Plant: semi-erect. Phylloclade: long and broad. Flower: sterile, sessile, white (RHS 155C) in colour, short pistil and stamen length, wide and short tepal blades.

Origin and Breeding Spontaneous mutation: a mutated branch of phylloclades was observed and selected in a stock bed of thousands of 'Christmas Fantasy'ϕ plants at applicant's nursery in 1995. 'Christmas Fantasy'ϕ is characterised by light apricot coloured flowers and same phylloclade habit. The mutant was characterised by white flowers. Selection criteria: semi-erect growth habit, vigorous branching habit of phylloclades, white flower colour. Propagation: vegetative through several generations. Breeder: Anthony P Brindley, Brindley's Nurseries, Coffs Harbour, NSW.

Choice of Comparators 'White Christmas' was selected as the sole comparator as it is the most similar variety of common knowledge. The parental material 'Christmas Fantasy'(Φ) was excluded from the trial due to its marked difference in flower colour as stated above.

Comparative Trial Location: Coffs Harbour, NSW, Sep 1999 – Jun 2000. Conditions: plants raised in peat/polystryrene/sand mixture in 75mm pots under fibreglass and watered as required, nutrition maintained with slow release fertiliser and regular liquid fertiliser applications through the growing period, pest and disease treatments applied as required. Trial design 20 un-replicated plants grown in random in a commercial greenhouse. Measurements: taken from 10 specimens taken at random from 20 plants.

Prior Applications and Sales

No prior applications. First sold in Australia in May 1998.

Description: **Anthony Brindley,** Coffs Harbour, NSW.

Table 46 *Schlumbergera* varieties

	'White Fantasy'	*'Christmas Fantasy'
PHYLLOCLADE WIDTH 2nd ORDER (mm)		
mean	42.7	33.4
std deviation	3.53	5.14
LSD/sig	4.03	P≤0.01
BUD: COLOUR OF TIP		
	white with green tinge	white
COROLLA LOBE: WIDTH		
	medium	medium-small
COROLLA LOBE: SIZE OF MACLUE IN RELATION TO SIZE OF LOBE		
	medium	small
COROLLA LOBE: WIDTH OF COLOURED RING		
	medium	small
STAMEN: LENGTH BEYOND MOUTH (mm)		
mean	26.0	29.6
std deviation	0.82	1.71
LSD/sig	0.94	P≤0.01
PISTIL: LENGTH BEYOND MOUTH (mm)		
mean	33.1	36.9
std deviation	0.99	1.79
LSD/sig	1.13	P≤0.01
OVARY COLOUR		
	pale green	very pale green

Trifolium subterraneum
Subterranean Clover

'Urana'

Application No: 1998/230 Accepted: 1 Dec 1998.
Applicant: **The State of Western Australia through its department of agriculture called Agriculture Western Australia**, South Perth, WA

Characteristics (Table 47, Figure 63) Plant: annual, self-pollinating, prostrate, vigorous, early maturing, var. *subterraneum*. Stem: strongly pubescent. Petiole: strongly pubescent. Leaflet: upper surfaces strongly pubescent, nil leaf mark using the classification of Nichols *et al.* (1996), purplish-brown anthocyanin flush along midrib under cold and other growth limiting conditions, indentation of distal margins weak, anthocyanin flecking absent. Stipule: pigmentation weak under closed canopies. Inflorescence: calyx tubes with purplish-red pigmentation along distal half. Peduncle: pubescence very strong. Seed: black, with approximately 74% hard after 16 weeks in an alternating $15^{O}/60^{O}$ C cabinet using the procedures of Quinlivan (1961). Isoflavone contents (% of dry matter) in fresh healthy leaves, using the method of Francis and Millington (1965): formononetin trace (<0.05%), genistein approximately 0.8%, biochanin A approximately 1.5%.

Origin and Breeding Controlled pollination: in 1981 at The University of Western Australia Field Station, Shenton Park to produce cross 81S44: seed parent 76S11.4.2 (CPI 65313B//Mt Helena A/Daglish) x pollen parent 75S13.8.1.1 (Dinninup//Daliak/Toodyay). Parent 75S13.8.1.1 differs from 'Urana' by its C_3A_{2-3} leaf mark (Nichols *et al*., 1996) and green calyx tube. Parent 76S11.4.2 is estimated to have flowered 1 week later than 'Urana'. Cross 81S44 was sown and harvested as a bulk population at UFS in each of the F_2, F_3 and F_4 generations. Seed produced from each of these generations was screened for hard-seededness in a fluctuating 60ºC/15ºC temperature for 4 months. Hardseeds after each 4-month treatment formed the basis of the successive generation. In 1986, 'Urana' (originally known as 81S44-16) was selected at Wongan Hills Research Station, Western Australia as one of 9 F_5 plants from cross 81S44. Selection criteria: low formononetin content (less than 0.2% of dry matter), early flowering, strong winter and early spring vigour and hard-seededness. Field evaluation was conducted from 1991-1997 under the code-name of SE003 in Western Australia, New South Wales, South Australia, Victoria, and Queensland as part of the National Annual Pasture Legume Improvement Program. Propagation: by seed. Breeders: Mr P.G.H. Nichols, Dr W.J. Collins and Dr J.S. Gladstones (Agriculture Western Australia). Selected for cultivar release by: Mr G.A. Sandral and Mr B.S. Dear (New South Wales Agriculture), Dr C.T. deKoning (South Australian Research and Development Institute), Mr P.M. Evans (Agriculture Victoria), Mr D.L. Lloyd (Queensland Department of Primary Industries) and Mr P.G.H. Nichols and Dr P. Si (Agriculture Western Australia).

Choice of Comparators There are no subterranean clover varieties of common knowledge with similar morphological characters to 'Urana'. 'Daliak', 'Dalkeith', 'Seaton Park' and 'York'(Φ) were selected for the comparative trial as these

are the most agronomically similar varieties of common knowledge to 'Urana'. 'York' description has previously been published in the *Plant Varieties Journal*. The parent lines could be distinguished by characteristics stated above.

Comparative Trial Location: University of Western Australia Field Station, Shenton Park, WA (Latitude 31°57′ South, longitude 115°47′ East, elevation 21m), 1999. Conditions: plants germinated in peat pots in the glasshouse in early May, transplanted to the field in mid-June, undefoliated throughout the season, hand-weeded, irrigated when necessary. Trial design: completely randomised design, 2 generations of each entry (1995 and 1998 seed), 5 replicates, each replicate consisting of a row with 6 plants spaced 1m apart. Measurements on 50-60 plants per variety.

Prior Applications and Sales Nil.

Description: **Phillip G.H. Nichols**, Agriculture Western Australia, South Perth, WA.

Table 47 *Trifolium* varieties

	'Urana'	*'Daliak'	*'Dalkeith'	*'Seaton Park'	*'York'ф
STEM (RUNNER) PUBESCENCE					
	very strong	medium	strong	strong	medium
PETIOLE PUBESCENCE					
	strong	weak	medium	weak	weak
LEAFLET CENTRAL MARKING (Nichols *et al*., 1996)					
	nil	C_1	C_2A_1	C_3A_2	C_2A_{1-2}
LEAFLET INDENTATION OF DISTAL MARGIN					
	weak	absent-weak	medium	medium	absent-weak
DEGREE OF LEAFLET ANTHOCYANIN FLECKING					
	absent	medium	weak	absent	absent
DEGREE OF LEAFLET ANTHOCYANIN FLUSH PATTERN					
	weak	absent-weak	absent	absent-weak	weak
LOCATION OF FLUSH PATTERN					
	midrib only	midrib and surrounding leaflet marking	n/a	surrounding leaflet marking	midrib and surrounding leaflet marking
LEAFLET UPPER SURFACE PUBESCENCE					
	strong	medium	medium	weak	absent-weak
FORMONONETIN CONTENT (% of dry matter in fresh leaves) using the method of Francis and Millington (1965)					
mean	0.01	0.25	0.00	0.05	0.02
std deviation	0.01	0.13	0.01	0.03	0.03
LSD/sig	0.02	P≤0.01	ns	P≤0.01	ns
GENISTEIN CONTENT (% of dry matter in fresh leaves) using the method of Francis and Millington (1965)					
mean	0.8	0.4	0.4	0.4	1.5
std deviation	0.2	0.2	0.2	0.1	0.3
LSD/sig	0.1	P≤0.01	P≤0.01	P≤0.01	P≤0.01
BIOCHANIN A CONTENT (% of dry matter in fresh leaves) using the method of Francis and Millington (1965)					
mean	1.5	0.5	0.1	1.7	0.8
std deviation	0.2	0.3	0.1	0.2	0.2
LSD/sig	0.1	P≤0.01	P≤0.01	P≤0.01	P≤0.01
DEGREE OF ANTHOCYANIN COLOURATION OF STIPULES (in shaded part of canopy)					
	weak	strong	weak	absent-weak	medium
DAYS TO FIRST FLOWERING					
mean	107.7	114.9	107.2	112.2	117.4
std deviation	3.4	5.7	2.9	2.8	3.9
LSD/sig	1.6	P≤0.01	ns	P≤0.01	P≤0.01
DEGREE OF ANTHOCYANIN COLOURATION ON CALYX TUBES					
	distal ½ of tube	entire tube	distal tip of tube	absent	distal ½ of tube
PEDUNCLE PUBESCENCE					
	very strong	medium	strong	strong	medium
SEED COLOUR					
	black	black	black	black	black

HARDSEEDEDNESS (% hardseed after 16 weeks in an alternating 60ºC/15ºC cabinet)[1] using the procedures of Quinlivan (1961)					
mean	74.1	40.0	56.1	38.3	58.9
std deviation	13.4	12.3	12.4	8.3	16.2
LSD/sig	5.3	P≤0.01	P≤0.01	P≤0.01	P≤0.01

[1] Expressed as a percentage of the hardseed percentage at the commencement of the test.

References

Francis, C.M and Millington, A.J. (1965). Varietal variation in the isoflavone content of subterranean clover: its estimation by a microtechnique. *Aust. J. Agric. Res.* **16**: 557-654

Nichols, P.G.H., Collins, W.J. and Barbetti, M.J. (1996). Registered cultivars of subterranean clover – their characteristics, origin and identification. Agriculture Western Australia Bulletin No. 4327, pp. 61.

Quinlivan, B.J (1961). The effect of constant and fluctuating temperatures on the permeability of the hard seeds of some legume species. *Aust. J. Agric. Res.* **16**: 1009-1022

GRANTS

Actinidia deliciosa
Kiwifruit

'Tomua'Ⓟ
Application No: 1998/093 Grantee: **The Horticulture and Food Research Institute of New Zealand Limited**.
Certificate No: 1541 Expiry Date: 22 August, 2025.
Agent: **Collison & Co**, Adelaide, SA.

Actinotus helianthi
Flannel Flower

'Starbright'Ⓟ
Application No: 1997/067 Grantee: **The Royal Botanic Gardens and Domain Trust**, Sydney, NSW.
Certificate No: 1590 Expiry Date: 29 September, 2020.

Alstroemeria hybrid
Alstroemeria

'Pink Diamond'Ⓟ
Application No: 1997/245 Grantee: **Van Staaveren b.v.**.
Certificate No: 1583 Expiry Date: 13 September, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Stalauli'Ⓟ syn Laura Ⓟ
Application No: 1997/253 Grantee: **Van Staaveren b.v.**.
Certificate No: 1584 Expiry Date: 13 September, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

'Starexan'Ⓟ syn Xandra Ⓟ
Application No: 1997/241 Grantee: **Van Staaveren b.v.**.
Certificate No: 1582 Expiry Date: 13 September, 2020.
Agent: **F & I Baguley Flower & Plant Growers**, Clayton South, VIC.

Anigozanthos hybrid
Kangaroo Paw

'Bush Pearl'Ⓟ
Application No: 1997/060 Grantee: **Yates Botanicals Pty Limited**, Somersby, NSW.
Certificate No: 1557 Expiry Date: 31 August, 2020.

Aster hybrid
Easter Daisy

'Dark Milka'Ⓟ
Application No: 1998/260 Grantee: **Nachtvlinder B.V.**
Certificate No: 1568 Expiry Date: 1 September, 2020.
Agent: **Yates Botanicals Pty Limited**, Somersby, NSW.

'Karmijn Milka'Ⓟ
Application No: 1998/262 Grantee: **Nachtvlinder B.V.**
Certificate No: 1570 Expiry Date: 1 September, 2020.
Agent: **Yates Botanicals Pty Limited**, Somersby, NSW.

'Milka'Ⓟ
Application No: 1997/312 Grantee: **Nachtvlinder B.V.**
Certificate No: 1567 Expiry Date: 1 September, 2020.
Agent: **Yates Botanicals Pty Limited**, Somersby, NSW.

'Peter's White'Ⓟ
Application No: 1998/261 Grantee: **Nachtvlinder B.V.**
Certificate No: 1569 Expiry Date: 1 September, 2020.
Agent: **Yates Botanicals Pty Limited**, Somersby, NSW.

Brassica napus var *oleifera*
Canola

'Charlton'Ⓟ
Application No: 1998/196 Grantee: **Agriculture Victoria Services Pty Ltd** Attwood, VIC and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1558 Expiry Date: 31 August, 2020.

'Hylite 200 TT'Ⓟ
Application No: 1998/240 Grantee: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.
Certificate No: 1589 Expiry Date: 19 September, 2020.

'Ripper'Ⓟ
Application No: 1999/161 Grantee: **Department of Agriculture for and on behalf of the State of New South Wales** and **Grains Research and Development Corporation**.
Certificate No: 1585 Expiry Date: 17 September, 2020.
Agent: **SGB Australia**, Collins Street West, VIC.

'Surpass 600'Ⓟ
Application No: 1998/239 Grantee: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.
Certificate No: 1588 Expiry Date: 19 September, 2020.

'Surpass 600 TT'Ⓟ
Application No: 1998/238 Grantee: **Pacific Seeds Pty Ltd**, Toowoomba, QLD.
Certificate No: 1587 Expiry Date: 19 September, 2020.

Cucurbita maxima
Pumpkin

'Dulong QHI'Ⓟ
Application No: 1997/309 Grantee: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.
Certificate No: 1556 Expiry Date: 30 August, 2020.

Dactylis glomerata
Cocksfoot

'Grasslands Excel'Ⓟ
Application No: 1998/087 Grantee: **New Zealand Pastoral Agriculture Research Institute Limited**.
Certificate No: 1547 Expiry Date: 23 August, 2020.
Agent: **AgResearch Australia Limited**, Drumcondra, VIC.

Fragaria xananassa
Strawberry

'Maroochy Blaze'(Þ
Application No: 1997/257 Grantee: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.
Certificate No: 1553 Expiry Date: 30 August, 2020.

'Maroochy Flame'(Þ
Application No: 1997/256 Grantee: **The State of Queensland through its Department of Primary Industries,** Brisbane, QLD.
Certificate No: 1552 Expiry Date: 30 August, 2020.

'Maroochy Jewel'(Þ
Application No: 1999/025 Grantee: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.
Certificate No: 1554 Expiry Date: 30 August, 2020.

'Maroochy Starfire'(Þ
Application No: 1997/255 Grantee: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.
Certificate No: 1551 Expiry Date: 30 August, 2020.

'Maroochy Sundew'(Þ
Application No: 1999/026 Grantee: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.
Certificate No: 1555 Expiry Date: 30 August, 2020.

'Sweet Charlie'(Þ
Application No: 1995/294 Grantee: **Florida Foundation Seed Producers, Inc.**.
Certificate No: 1550 Expiry Date: 30 August, 2020.
Agent: **The State of Queensland through its Department of Primary Industries**, Brisbane, QLD.

Gaura lindheimeri
Gaura

'So White'(Þ
Application No: 1997/292 Grantee: **Hartley Lewis and Malcolm Lewis**, Virginia, SA.
Certificate No: 1545 Expiry Date: 22 August, 2020.

Lavandula stoechas
Italian Lavender

'Darling Crown'(Þ
Application No: 1995/300 Grantee: **Kristine and Geofrey Napier**.
Certificate No: 1544 Expiry Date: 22 August, 2020.
Agent: **Wyvee Horticultural Services**, Lilydale, VIC.

Lavandula stoechas ssp *pedunculata*
Lavender

'Willowbridge Wings'(Þ
Application No: 1998/043 Grantee: **Willowbridge Perennials**.
Certificate No: 1548 Expiry Date: 27 August, 2020.
Agent: **Greenhills Propagation Nursery P/L**, Tynong, VIC.

Leptospermum hybrid
Tea Tree

'Rudolph'(Þ
Application No: 1997/345 Grantee: **Peter James Ollerenshaw**, Bungendore, NSW.
Certificate No: 1542 Expiry Date: 22 August, 2020.

Mandevilla sanderi
Mandevilla

'Guinevere'(Þ
Application No: 1998/152 Grantee: **Hans Georg Storm**.
Certificate No: 1538 Expiry Date: 15 August, 2020.
Agent: **Redlands Nursery Pty Ltd**, Redland Bay, QLD.

Medicago sativa
Lucerne, Alfalfa

'Grasslands Torlesse'(Þ
Application No: 1996/036 Grantee: **New Zealand Pastoral Agriculture Research Institute Limited**.
Certificate No: 1586 Expiry Date: 19 September, 2020.
Agent: **AgResearch Australia Limited**, Drumcondra, VIC.

Persea americana
Avocado

'Llanos Hass'(Þ
Application No: 1997/159 Grantee: **Anthony Philip Llanos and Cassandra Ann Llanos**, Hope Valley, WA.
Certificate No: 1540 Expiry Date: 22 August, 2025.

Philotheca myoporoides
Waxflower (long-leaved)

'Lime Delight'(Þ
Application No: 1999/237 Grantee: **RJ Cherry**, Kulnura, NSW.
Certificate No: 1591 Expiry Date: 29 September, 2020.

Pisum sativum
Field Pea

'Mukta'(Þ
Application No: 1999/053 Grantee: **Minister for Primary Industries, Natural Resources and Regional Development** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1581 Expiry Date: 13 September, 2020.

'Parafield'(Þ
Application No: 1999/006 Grantee: **Minister for Primary Industries, Natural Resources and Regional Development** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1576 Expiry Date: 12 September, 2020.

'Santi'(Þ)
Application No: 1999/054 Grantee: **Minister for Primary Industries, Natural Resources and Regional Development** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1579 Expiry Date: 13 September, 2020.

'Soupa'(Þ)
Application No: 1999/027 Grantee: **Minister for Primary Industries, Natural Resources and Regional Development** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1580 Expiry Date: 13 September, 2020.

Rosa hybrid
Miniature Rose

'Baby Jack'(Þ)
Application No: 1998/158 Grantee: **Kay-D-Tee**, Silvan, VIC.
Certificate No: 1573 Expiry Date: 12 September, 2020.

'Benmable'(Þ) syn Benardella's Waltz(Þ)
Application No: 1998/161 Grantee: **Harlane Rose Specialists**.
Certificate No: 1574 Expiry Date: 12 September, 2020.
Agent: **Kay L Neil of Kay-D-Tee**, Silvan, VIC.

'Benmjul'(Þ) syn Benardella's Ruby(Þ)
Application No: 1998/162 Grantee: **Harlane Rose Specialists**.
Certificate No: 1575 Expiry Date: 12 September, 2020.
Agent: **Kay L Neil of Kay-D-Tee**, Silvan, VIC.

'Lavflush'(Þ) syn Double Date(Þ)
Application No: 1998/120 Grantee: **Springwood Consultants Ltd**.
Certificate No: 1578 Expiry Date: 13 September, 2020.
Agent: **John Oakes**, Carrum Downs, VIC.

'Meihauzrey'(Þ) syn Bright Minijet(Þ)
Application No: 1998/156 Grantee: **Meilland International**.
Certificate No: 1571 Expiry Date: 12 September, 2020.
Agent: **Australian Roses**, Silvan, VIC.

'Meihoto'(Þ) syn Sammi Minijet(Þ)
Application No: 1998/157 Grantee: **Meilland International**.
Certificate No: 1572 Expiry Date: 12 September, 2020.
Agent: **Australian Roses**, Silvan, VIC.

Saccharum hybrid
Sugarcane

'Q176'(Þ)
Application No: 1999/137 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1559 Expiry Date: 1 September, 2020.

'Q177'(Þ)
Application No: 1999/138 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1560 Expiry Date: 1 September, 2020.

'Q178'(Þ)
Application No: 1999/192 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1562 Expiry Date: 1 September, 2020.

'Q179'(Þ)
Application No: 1999/193 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1563 Expiry Date: 1 September, 2020.

'Q180'(Þ)
Application No: 1999/139 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1561 Expiry Date: 1 September, 2020.

'Q181'(Þ)
Application No: 1999/194 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1564 Expiry Date: 1 September, 2020.

'Q182'(Þ)
Application No: 1999/195 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1565 Expiry Date: 1 September, 2020.

'Q185'(Þ)
Application No: 1999/196 Grantee: **Bureau of Sugar Experiment Stations**, Indooroopilly, QLD.
Certificate No: 1566 Expiry Date: 1 September, 2020.

Syzygium australe
Lilly Pilly

'Bush Christmas'(Þ)
Application No: 1995/132 Grantee: **Fairhill Native Plants**, Yandina, QLD.
Certificate No: 1549 Expiry Date: 27 August, 2025.

Trifolium incarnatum
Crimson Clover

'Blaza'(Þ)
Application No: 1999/146 Grantee: **Seedco Australia Co-operative Limited**, Hilton, SA.
Certificate No: 1539 Expiry Date: 22 August, 2020.

Trifolium repens
White Clover

'Grasslands Bounty'(Þ)
Application No: 1998/080 Grantee: **New Zealand Pastoral Agriculture Research Institute Limited**.
Certificate No: 1546 Expiry Date: 23 August, 2020.
Agent: **AgResearch Australia Limited**, Drumcondra, VIC.

Triticum aestivum
Wheat

'Dennis'(Þ)
Application No: 1999/267 Grantee: **CSIRO Plant Industry**, Acton, ACT and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1543 Expiry Date: 22 August, 2020.

Vicia sativa
Common Vetch

'Morava'(þ)
Application No: 1999/012 Grantee: **Minister for Primary Industries, Natural Resources and Regional Development** Adelaide, SA and **Grains Research and Development Corporation**, Barton, ACT.
Certificate No: 1577 Expiry Date: 12 September, 2020.

DENOMINATION CHANGED

Agapanthus inapertus x *Agapanthus orientalis*
Agapanthus

'Blue Brush'
Application No: 1999/271
From: 'Fragrant Blue'

Agapanthus orientalis
Agapanthus

'Snow Cloud' syn **Summer Pearl**
Application No: 1998/146
From: 'Fragrant Snow'

Alstroemeria hybrid
Alstroemeria

'Pink Diamond'(þ)
Application No: 1997/245 Certificate Number: 1583
From: 'Testapink' syn Pink Diamond

Brassica napus var *oleifera*
Canola

'ATR-Hyden'
Application No: 1999/349
From: 'AGA99-27'

'ATR-Grace'
Application No: 1999/344
From: 'TM4'

Camellia sasanqua
Camellia

'PARJOA'
Application No: 1997/189
From: 'Paradise Joan'

'PARSAY'
Application No: 1997/188
From: 'Paradise Sayaka'

Fragaria x*ananassa*
Strawberry

'Tamar'
Application No: 1997/236
From: 'Israeli Tamar'

Lilium hybrid
Lily

'Holecici'
Application No: 1997/163
From: 'Hoffrica Blue Eyes'

Lonicera nitida
Box Honeysuckle

'PARROY'
Application No: 1998/219
From: 'Paradise Royal Flush'

Rosa hybrid
Rose

'POULdacen'
Application No: 1999/376
From: 'POULdace'

'POULen002'
Application No: 1999/383
From: 'POULsolo'

Trifolium subterraneum
Subterranean Clover

'Urana'
Application No: 1998/230
From: 'SE003'

Triticum aestivum
Wheat

'Mulgara'
Application No: 2000/125
From: 'JM73'

'Strzelecki'
Application No: 1999/327
From: 'QT7709'

SYNONYM CHANGED

Agapanthus orientalis
Agapanthus

'Glen Avon'
Application No: 1998/147
From: Fragrant Glen
To: Summer Blue

AGENT CHANGED

From: Peter Neilson, AgResearch Grasslands
To: Denis McGrath, AgResearch (Australia) Limited
for all the PBR applications of New Zealand Agricultural Research Institute Limited for which Peter Neilson, AgResearch Grasslands was the agent.

CHANGE IN AGENT'S NAME

From: AJ Newport & Son Pty Limited
To: Oasis Horticulture Pty Ltd
for all the PBR applications for which AJ Newport & Son Pty Limited was the agent.

From: H.R.Hodgkinson & Co
To: Hodgkinson Old McInnes
for the following PBR application:

Cantharellus cibarius
Mushroom

'Cantherelle' syn **Fanfar**
Application No: 1997/224

CHANGE OF ASSIGNMENT

From: AJ Newport & Son Pty Limited
To: Oasis Horticulture Pty Ltd
for the following PBR applications:

Bracteantha bracteata
Everlasting Daisy

'NN-9812AE'
Application No: 1999/318

'NN-B9821A'
Application No: 1999/319

'NN-B9892'
Application No: 1999/320

Chamelaucium hybrid
Waxflower hybrid

'Crystal'(b)
Application No: 1995/239 Certificate No: 1012.

Chamelaucium uncinatum
Geraldton Wax

'Cascade Brilliance'(b)
Application No: 1996/200 Certificate No: 1272

'Cascade Brook'(b)
Application No: 1993/161 Certificate No: 779

'Cascade Jewel'(b)
Application No: 1993/159 Certificate No: 507

'Cascade Mist'(b)
Application No: 1993/160 Certificate No: 442

From: PBI Cambridge Ltd
To: Cygnet Potato Breeders Ltd
for the following PBR application

Solanum tuberosum
Potato

'Saxon'(b)
Application No: 1996/210 Certificate No: 1201

CONFIRMATION OF APPLICANT'S NAME

From: Royal Botanic Gardens, Sydney
To: The Royal Botanic Gardens and Domain Trust
for any PBR application that include Royal Botanic Gardens, Sydney as the applicant or the joint applicant.

From:
CEO Agriculture, WA
Chief Executive Officer of the Department of Agriculture, WA
Chief Executive Officer, Agriculture Western Australia
To: The State of Western Australia through its department of agriculture called Agriculture Western Australia
for all PBR applications that include any of the above names as applicant or joint applicant.

From: Uni. of New England, Dept. of Botany
The University of New England
To: University of New England
for all PBR applications that include any of the above names as applicant or joint applicant.

APPLICATIONS WITHDRAWN

The following varieties are no longer under provisional protection:

Alstroemeria hybrid
Alstroemeria

'Inca Charm'
Application No: 1998/028

'Inca Gold'
Application No: 1998/193

'Inca Sunset'
Application No: 1998/191

Apium prostratum
Sea Parsley

'Southern Ocean'
Application No: 1996/029

Chamelaucium uncinatum
Geraldton Wax

'OFIR'
Application No: 1998/133

Chamelaucium uncinatum x *Chamelaucium megalopetalum*
Waxflower hybrid

'ADI'
Application No: 1998/234

Malus domestica
Apple

'Sun Lady' syn **Price Spur Sun Lady**
Application No: 1993/146

Mentha diemenica
Slender Mint

'Kosciusko'
Application No: 1996/030

Prunus persica var *nucipersica*
Nectarine

'Queen Silla'
Application No: 1996/009

Rosa hybrid
Rose

'Grandzeta'
Application No: 2000/088

'Sunpari' syn **La Parisienne**
Application No: 1999/288

'Tanledolg' syn **Peter Mac's Gold Juwel**
Application No: 1997/231

Solanum tuberosum
Potato

'Pacific' syn **Crop 5**
Application No: 1998/171

'Smith's Starlight'
Application No: 1999/231

GRANTS SURRENDERED

The following varieties are no longer under protection:

Alstroemeria hybrid
Alstroemeria

'Aruba'
Application No: 1994/191 Certificate Number: 570

'Delta' syn **Inca Salsa**
Application No: 1998/030 Certificate Number: 1458

'Java'
Application No: 1994/192 Certificate Number: 571

Bracteantha bracteata
Everlasting Daisy

'Spectrum'
Application No: 1995/285 Certificate Number: 1019

Brassica napus var *oleifera*
Canola

'Narendra'
Application No: 1992/010 Certificate Number: 383

Diascia hybrid
Diascia

'Jacqueline's Joy'
Application No: 1993/212 Certificate Number: 816

'Joyce's Choice'
Application No: 1993/213 Certificate Number: 817

'Lady Valerie'
Application No: 1994/168 Certificate Number: 819

'Lilac Belle'
Application No: 1993/214 Certificate Number: 818

'Lilac Mist'
Application No: 1993/209 Certificate Number: 815

'Salmon Supreme'
Application No: 1993/198 Certificate Number: 820

Euphorbia pulcherrima
Poinsettia

'Duecohopi' syn **Red Fox Coco Hot Pink**
Application No: 1998/257 Certificate Number: 1530

'Duemal' syn **Red Fox Malibu Red**
Application No: 1998/208 Certificate Number: 1496

'Duenidared' syn **Red Fox Victory Red**
Application No: 1998/207 Certificate Number: 1500

'Duestarapri' syn **Red Fox Apricot Highlight**
Application No: 1997/329 Certificate Number: 1104

Hardenbergia violacea
False Sarsparilla

'Purple Falls'
Application No: 1991/055 Certificate Number: 278

Hordeum vulgare
Barley

'Chieftain'
Application No: 1995/129 Certificate Number: 774

Lavandula hybrid
Lavender

'Henri Dunant'
Application No: 1993/174 Certificate Number: 566

Leucadendron uliginosum x *Leucadendron discolor*
Leucadendron

'Our Vision'
Application No: 1994/006 Certificate Number: 1320

Osteospermum ecklonis
Cape Daisy

'Swazi'
Application No: 1996/054 Certificate Number: 914

Rhododendron hybrid
Azalea

'Princess Pat'
Application No: 1994/138 Certificate Number: 481

Rhododendron simsii
Azalea

'Otto'
Application No: 1994/071 Certificate Number: 485

'Paradiso'
Application No: 1995/155 Certificate Number: 669

Rosa hybrid
Rose

'Ausfin' syn **Financial Times Centenary**
Application No: 1993/105 Certificate Number: 476

'Delicious' syn **Weldel**
Application No: 1992/017 Certificate Number: 562

'Meimagul' syn **Gypsy Minijet**
Application No: 1994/188 Certificate Number: 853

'Woman's Day' syn **Welira**
Application No: 1992/018 Certificate Number: 569

Schlumbergera hybrid
Zygocactus

'Cambridge'
Application No: 1989/095 Certificate Number: 51

'Orange Fantasy'
Application No: 1989/097 Certificate Number: 52

Schlumbergera truncata
Zygocactus

'Lavender Fantasy' syn **Lavender Doll II**
Application No: 1990/088 Certificate Number: 121

'Magic Fantasy' syn **Christmas Magic 11**
Application No: 1990/087 Certificate Number: 120

Vicia faba
Field Bean

'Icarus'
Application No: 1992/007 Certificate Number: 492

CORRIGENDA

Pyrus communis
European Pear

'Corinella'
Application No: 1998/188

The amended harvest dates of mature fruits for 'Corinella' and its comparators in Table 32 of *PVJ* 12(4) are as follows:

	'Corinella'	***'Packham Triumph'**	***'Paradise'**
SEASON OF MATURITY – Harvest Date (Lancaster, VIC)			
	Apr 1st	Feb 25th	Feb 3rd

Capsicum annuum
Chilli Pepper

'Peppadew' syn **Steenkamp**
Application No: 1997/062

In the origin of this variety published in *PVJ* 11(3)18, it was incorrectly mentioned that "the variety is probably a stable mutation from the Habanero chilli". It is now being confirmed that the variety originated from an open-pollination of *Capsicum annuum* x *Capsicum annuum.* In addition, the description of this variety should add: "a Habanero-like chilli pepper within *C. annuum,* with a round-heart shape, short-shelf life and mid-maturity bright orange colouration".

The comparators for this variety was selected upon the advice from the industry who realised similarities between the candidate variety and known *C. annuum and C. chinense* varieties.

APPENDIX 1

FEES

Two fee structures exist as a result of the transition from Plant Variety Rights to Plant Breeders Rights.
For new applications (those lodged on or after 11 November 1994) the PBR fees apply. For older applications lodged before 11 November 1994 and not finally disposed of (Granted, Withdrawn, Refused etc.) the PVR fees in force at the time apply.

The Treasurer has determined that all statutory fees under PBR regulations will be exempted from GST.

Payment of Fees

All cheques for fees should be made payable and sent to:

Collector of Public Monies
C/- Plant Breeders Rights Office
GPO Box 858
Canberra, ACT 2601

The **application fee** ($300) must accompany the application at the time of lodgement.

Consequences of not paying fees when due
Application fee
Should an application not be accompanied by the prescribed application fee the application will be deemed to be 'non-valid' and neither assigned an application number nor examined for acceptance pending the payment of the fee.

Examination fee
Non-payment of the examination fee of an application will automatically result, at the end of 12 months from the date of acceptance, in a refusal of the application. The consequences of refusal are the same as for applications deemed to be inactive (see 'inactive applications' below).

Field examinations and final examinations falling within the first 12 months will *not* be undertaken without prior payment of the examination fee.

Consideration of a request for an extension of the period of provisional protection from the initial 12 month period may require the prior payment of the examination fee.

Certificate fee
Following the successful completion of the examination, including the public notice period, the applicant will be required and invoiced to pay the certification fee. Payment of the certification fee is a prerequisite to granting PBR and issuing the official certificate by the PBR office. Failure to pay the fee may result in a refusal to grant PBR.

Annual fee
Should an annual renewal fee not be paid within 30 days after the due date, the grant of PBR will be revoked under Section 50 of the PBR Act. To assist grantees, the PBR office will invoice grantees or their Australian agents for renewal fees.

Inactive applications
An application will be deemed inactive if, after 24 months of provisional protection (or 12 months in the case of non-payment of the examination fee) the PBR Office has not received a completed application or has not been advised to proceed with the examination or an extension of provisional protection has not been requested or not granted or a certificate fee has not been paid. Inactive applications will be examined and, should they not fully comply with Section 44 of the PBR Act 1994, they will be refused. As a result provisional protection will lapse, priority claims on that variety will be lost and should the variety have been sold, it will be ineligible for plant breeders rights on reapplication. Continued use of labels or any other means to falsely imply that a variety is protected after the application has been refused is an offence under Section 75 of the Act.

FEES

Basic Fees	Schedule			
	A	B	C	D
	$			
Application	300	300	400	300
Examination – per application	1400	1200	1400	800
Certificate	300	300	250	300
Total Basic Fees	2000	1800	2050	1400
Annual Renewal – all applications	300			

Schedule
A Single applications and applications based on an official overseas test reports.
B Applicable when two or more Part 2 Applications are lodged simultaneously and the varieties are of the same genus and the examinations can be completed at one location at the same time.
C Applications lodged under PVR (prior to 10th Nov 1994)
D Applicable to 5 or more applications examined at an Accredited Centralised Testing Centre

Other Fees	
Variation to application(s) – per hour or part thereof	75
Change of Assignment – per application	100
Copy of an application (Part1 and/or Part2), an objection or a detailed description	50
Copy of an entry in the Register	50
Lodging an objection	100
Annual subscription to Plant Varieties Journal	40
Back issues of Plant Varieties Journal	14
Administration – Other work relevant to PBR – per hour or part thereof	75
Application for declaration of essential derivation	800
Application for (a) revocation of a PBR	500
(b) revocation of a declaration of essential derivation	500
Compulsory licence	500
Request under subsection 19(11) for exemption from public access – varieties with no direct use as a consumer	

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APPENDIX 2

Plant Breeders Rights Advisory Committee (PBRAC)

(Members of the PBRAC hold office in accordance with Section 85 of the *Plant Breeder's Rights Act 1994*.)

Dr Paul **Brennan**
PO Box 144
LENNOX HEAD NSW 2478
Representing Plant Breeders

Ms Cheryl **McCaffery**
Business Development Manager
UniQuest Limited
Research Road
University of Queensland
ST LUCIA QLD 4072
Member with appropriate qualifications and experience

Mr David **Moore**
Consultant
Applied Economic and Technology Services
PO Box 193
GAWLER, SA 5118
Representing consumers

Mr. Peter **Neilson**
Crop and Food Research
Birrabee Park
Bowna via
ALBURY NSW 2640
Representing Plant Breeders

Mr Hugh **Roberts**
Farmer
'Birralee'
COOTAMUNDRA NSW 2694
Representing Users

Ms Anna **Sharpe**
Clayton Utz
GPO Box 55
BRISBANE QLD 4000
Member with appropriate qualifications and experience

Mr Doug **Waterhouse** (Chair)
Registrar, Plant Breeders Rights
GPO Box 858
CANBERRA ACT 2601

Comments on the technical operation of, or amendments to, the *Plant Breeder's Rights Act 1994*, particularly applications under section 17(2), should be directed through the Chairman.

APPENDIX 3

INDEX OF ACCREDITED CONSULTANT 'QUALIFIED PERSONS'

The following persons have been accredited by the PBR office based on information provided by these persons. From the information provided by the applicants, the PBR office believes that these people can fulfil the role of 'qualified person' in the application for plant breeder's rights. Neither accreditation nor publication of a name in the list of persons is an implicit recommendation of the person so listed. The PBR office cannot be held liable for damages that may arise from the omission or inclusion of a person's name in the list nor does it assume any responsibility for losses or damages arising from agreements entered into between applicants and any person in the list of accredited persons. Qualified persons charge a fee for services rendered.

A guide to the use of the index of consultants:

- locate in the left column of Table 1 the plant group for which you are applying;
- listed in the right column are the names of accredited qualified persons from which you can choose a consultant;
- in Table 2 find that consultant's name, telephone number and area in which they are willing to consult (they may consult outside the nominated area);
- using the "Nomination of Qualified Person" form as a guide, agree provisionally on the scope and terms of the consultancy; complete the form and attach it to Part 1 of the application form;
- when you are notified that your nomination of a consultant qualified person is acceptable in the letter of acceptance of your application for PBR you should again consult the qualified person when planning the rest of the application for PBR.

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TABLE 1

PLANT GROUP/ SPECIES/ FAMILY	CONSULTANT'S NAME (TELEPHONE AND AREA IN TABLE 2)
Almonds	Swinburn, Garth
Apple	Baxter, Leslie Darmody, Liz Fleming, Graham Langford, Garry Mackay, Alastair Maddox, Zoee Malone, Michael Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter Stearne, Peter Tancred, Stephen Valentine, Bruce
Anigozanthos	Paananen, Ian Kirby, Greg
Aroid	Harrison, Peter
Avocado	Swinburn, Garth
Azalea	Barrett, Mike Hempel, Maciej Paananen, Ian
Barley (Common)	Boyd, Rodger Brouwer, Jan Collins, David Khan, Akram Platz, Greg
Berry Fruit	Darmody, Liz Fleming, Graham Maddox, Zoee Pullar, David Robinson, Ben Scholefield, Peter
Blueberry	Pullar, David
Bougainvillea	Iredell, Janet Willa
Brassica	Aberdeen, Ian Baker, Andrew Easton, Andrew Chowdhury, Doza Cross, Richard Fennell, John Kadkol, Gururaj McMichael, Prue Pullar, David Robinson, Ben Scholefield, Peter Tay, David
Buddleia	Robb, John Paananen, Ian
Cactaceae	Friend, Joe
Camellia	Paananen, Ian Robb, John
Cassava	Tay, David
Cereals	Alam, Rafiul Brouwer, Jan Bullen, Kenneth Collins, David Cook, Bruce Cooper, Kath Cross, Richard Davidson, James Derera, Nicholas AM Downes, Ross Fennell, John Hare, Raymond Harrison, Peter Henry, Robert J Khan, Akram Kidd, Charles Law, Mary Ann Mitchell, Leslie Oates, John Platz, Greg Poulsen, David Rose, John Scattini, Walter John Stearne, Peter Stuart, Peter Vertigan, Wayne Williams, Warren Wilson, Frances
Cherry	Darmody, Liz Fleming, Graham Mackay, Alastair Maddox, Zoee Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter
Chickpeas	Brouwer, Jan Chowdhury, Doza Collins, David Goulden, David
Citrus	Ayash, Abdo Edwards, Megan Fox, Primrose Gingis, Aron Lee, Slade Maddox, Zoee Mitchell, Leslie Pullar, David Robinson, Ben Scholefield, Peter Swinburn, Garth Sykes, Stephen Topp, Bruce
Clover	Lake, Andrew Miller, Jeff Mitchell, Leslie Nichols, Phillip
Conifer	Stearne, Peter
Cotton	Alam, Rafiul Derera, Nicholas AM Leske, Richard
Cucurbits	Alam, Rafiul Ayash, Abdo Cross, Richard Herrington, Mark McMichael, Prue Pullar, David Robinson, Ben Scholefield, Peter Sykes, Stephen
Cydonia	Baxter, Leslie
Dogwood	Darmody, Liz Fleming, Graham Maddox, Zoee Stearne, Peter
Feijoa	Robinson, Ben Scholefield, Peter
Fibre Crops	Ayash, Abdo
Fig	Darmody, Liz FitzHenry, Daniel Fleming, Graham Maddox, Zoee Pullar, David
Forage Brassicas	Goulden, David
Forage Grasses	Berryman, Tim Fennell, John Harrison, Peter Kirby, Greg Mitchell, Leslie Slatter, John Smith, Kevin
Forage Legumes	Fennell, John Foster, Kevin Harrison, Peter Hill, Jeff Lake, Andrew Miller, Jeff Slatter, John Snowball, Richard
Forest Trees	Lubomski, Marek
Fruit	Ayash, Abdo Beal, Peter Darmody, Liz Fleming, Graham Gingis, Aron Kennedy, Peter Lenoir, Roland Maddox, Zoee McCarthy, Alec Mitchell, Leslie Pullar, David

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Robinson, Ben
Scholefield, Peter

Fungi, Basidiomycetes
Cairney, John

Fungi, Entomopathogenic
Milner, Richard

Grapes
Biggs, Eric
Darmody, Liz
Fleming, Graham
Gingis, Aron
Lee, Slade
Maddox, Zoee
Mitchell, Leslie
Pullar, David
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Swinburn, Garth
Sykes, Stephen

Grevillea
Herrington, Mark

Hydrangea
Hanger, Brian
Maddox, Zoee

Impatiens
Paananen, Ian

Jojoba
Dunstone, Bob

Legumes
Aberdeen, Ian
Bahnisch, L
Baker, Andrew
Chowdhury, Doza
Collins, David
Cook, Bruce
Cruickshank, Alan
Downes, Ross
Foster, Kevin
Harrison, Peter
Imrie, Bruce
Kirby, Greg
Knights, Edmund
Lake, Andrew
Law, Mary Ann
Loch, Don
Mitchell, Leslie
Nutt, Bradley
Rose, John
Snowball, Richard

Lentils
Brouwer, Jan
Chowdhury, Doza
Collins, David
Goulden, David

Lucerne
Lake, Andrew
Mitchell, Leslie
Nichols, Phillip

Lupin
Collins, David

Magnolia
Paananen, Ian

Maize
Slatter, John

Myrtaceae
Dunstone, Bob

Native grasses
Quinn, Patrick
Waters, Cathy

Neem
Friend, Joe

Oat
Collins, David
Khan, Akram
Platz, Greg

Oilseed crops
Downes, Ross
Kidd, Charles
Poulsen, David
Slatter, John

Olives
Ayash, Abdo
Bazzani, Mr Luigi
Gingis, Aron
Pullar, David

Onions
Cross, Richard
Fennell, John
Gingis, Aron
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter

Ornamentals – Exotic
Abell, Peter
Armitage, Paul
Angus, Tim
Ayash, Abdo
Barth, Gail
Beal, Peter
Collins, Ian
Cross, Richard
Cunneen, Thomas
Darmody, Liz
Dawson, Iain
Derera, Nicholas AM
Eggleton, Steve
Fisk, Anne Marie
Fitzhenry, Daniel
Fleming, Graham
Gingis, Aron
Harrison, Peter
Hempel, Maciej
Johnston, Margaret
Kirkham, Roger
Kwan, Brian
Kulkarni, Vinod
Lamont, Greg
Larkman, Clive
Lenoir, Roland
Lowe, Greg
Lubomski, Marek
Lunghusen, Mark
Maddox, Zoee
McMichael, Prue
Mitchell, Leslie
Nichols, David
Oates, John
Paananen, Ian
Robb, John
Robinson, Ben
Scholefield, Peter
Singh, Deo
Stearne, Peter
Stewart, Angus
Tay, David
Van der Ley, John
Washer, Stewart
Watkins, Phillip
Winfield, Joel

Ornamentals – Indigenous
Abell, Peter
Allen, Paul
Angus, Tim
Ayash, Abdo
Barrett, Mike
Barth, Gail
Beal, Peter
Cunneen, Thomas
Dawson, Iain
Derera, Nicholas AM
Downes, Ross
Eggleton, Steve
Harrison, Peter
Henry, Robert J
Hockings, David
Jack, Brian
Johnston, Margaret
Kirby, Greg
Kirkham, Roger
Lenoir, Roland
Lowe, Greg
Lullfitz, Robert
Lunghusen, Mark
McMichael, Prue
Molyneux, W M
Nichols, David
Oates, John
Paananen, Ian
Robinson, Ben
Scholefield, Peter
Singh, Deo
Stearne, Peter
Tan, Beng
Watkins, Phillip
Winfield, Joel
Worrall, Ross

Ornithopus
Foster, Kevin
Nichols, Phillip
Nutt, Bradley
Snowball, Richard

Osmanthus
Paananen, Ian
Robb, John

Pastures & Turf
Aberdeen, Ian
Anderson, Malcolm
Avery, Angela
Bahnisch, L
Berryman, Tim
Cameron, Stephen
Cook, Bruce
Downes, Ross
Croft, Valerie
Harrison, Peter
Kaapro, Jyri
Kirby, Greg
Loch, Don
Miller, Jeff
Mitchell, Leslie
Rose, John
Smith, Raymond
Scattini, Walter John

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Slatter, John
Smith, Kevin
Williams, Warren
Wilson, Frances

Peanut
Cruickshank, Alan
George, Doug
Tay, David

Pear
Baxter, Leslie
Darmody, Liz
Fleming, Graham
Langford, Garry
Mackay, Alastair
Maddox, Zoee
Malone, Michael
Pullar, David
Robinson, Ben
Scholefield, Peter
Tancred, Stephen
Valentine, Bruce

Persimmon
Swinburn, Garth

Petunia
Paananen, Ian
Nichols, David

Photinia
Robb, John

Pistacia
Pullar, David
Sykes, Stephen

Pisum
Brouwer, Jan
Chowdhury, Doza
Goulden, David
McMichael, Prue

Potatoes
Ayash, Abdo
Baker, Andrew
Cross, Richard
Fennell, John
Kirkham, Roger
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Tay, David

Proteaceae
Barth, Gail
Kirby, Neil
Robb, John
Robinson, Ben
Scholefield, Peter

Prunus
Ayash, Abdo
Darmody, Liz
Fleming, Graham
Kennedy, Peter
Mackay, Alastair
Maddox, Zoee
Malone, Michael
Porter, Gavin
Pullar, David
Topp, Bruce
Witherspoon, Jennifer

Pulse Crops
Bestow, Sue
Brouwer, Jan
Chowdhury, Doza
Collins, David
Cross, Richard
Kidd, Charles
Oates, John
Poulsen, David
Slatter, John

Raspberry
Darmody, Liz
Fleming, Graham
Martin, Stephen
Pullar, David
Robinson, Ben
Scholefield, Peter

Rhododendron
Barrett, Mike
Paananen, Ian

Roses
Barrett, Mike
Cross, Richard
Darmody, Liz
Fitzhenry, Daniel
Fleming, Graham
Fox, Primrose
Gingis, Aron
Hanger, Brian
Lee, Peter
Maddox, Zoee
Prescott, Chris
Robinson, Ben
Scholefield, Peter
Stearne, Peter
Swane, Geoff
Syrus, A Kim
Van der Ley, John

Sesame
Bennett, Malcolm
Harrison, Peter
Imrie, Bruce

Sorghum
Khan, Akram
Slatter, John

Soybean
Andrews, Judith
Harrison, Peter
James, Andrew

Spices and Medicinal Plants
Derera, Nicholas AM
Pullar, David

Stone Fruit
Ayash, Abdo
Barrett, Mike
Darmody, Liz
Fleming, Graham
Kennedy, Peter
Mackay, Alistair
Maddox, Zoee
Malone, Michael
Pullar, David
Robinson, Ben
Scholefield, Peter
Swinburn, Garth
Valentine, Bruce

Strawberry
Gingis, Aron
Herrington, Mark
Martin, Stephen
Mitchell, Leslie
Morrison, Bruce
Porter, Gavin
Pullar, David
Robinson, Ben
Scholefield, Peter
Zorin, Clara

Sugarcane
Cox, Mike
Morgan, Terence
Tay, David

Sunflower
George, Doug

Tomato
Cross, Richard
Gingis, Aron
Herrington, Mark
Martin, Stephen
McMichael, Prue
Pullar, David
Robinson, Ben
Scholefield, Peter

Tree Crops
Friend, Joe
McRae, Tony

Triticale (x Triticosecale Wittmack)
Collins, David

Tropical/Sub-Tropical Crops
Ayash, Abdo
Harrison, Peter
Kulkarni, Vinod
Pullar, David
Robinson, Ben
Scholefield, Peter
Tay, David
Winston, Ted

Umbrella Tree
Paananen, Ian

Vegetables
Alam, Rafiul
Ayash, Abdo
Baker, Andrew
Beal, Peter
Cross, Richard
Derera, Nicholas AM
Fennell, John
Frkovic, Edward
Gingis, Aron
Harrison, Peter
Kirkham, Roger
Lenoir, Roland
McMichael, Prue
Oates, John
Pearson, Craig
Pullar, David
Robinson, Ben
Scholefield, Peter
Tay, David
Westra Van Holthe, Jan

Verbena
Paananen, Ian

Wheat (Aestivum & Durum Groups)
Brouwer, Jan
Collins, David
Khan, Akram
Platz, Greg

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TABLE 2

NAME	TELEPHONE	AREA OF OPERATION
Abel, Peter	02 9351 8825	
	02 9351 8875 fax	New South Wales
Aberdeen, Ian	03 5782 1029	
	03 5782 2073 fax	SE Australia
Alam, Rafiul	07 5460 1184	
	07 5460 1112 fax	SE QLD
Allen, Paul	07 3824 0263 ph/fax	SE QLD, Northern NSW
Anderson, Malcolm	03 5573 0900	
	03 5571 1523 fax	
	017 870 252 mobile	Victoria
Andrews, Judith	02 6951 2614	
	02 6955 7580 fax	Southern NSW, Northern VIC
Angus, Tim	02 4751 5702 ph/fax	Australia and New Zealand
Armitage, Paul	03 9756 7233	
	03 9756 6948 fax	Victoria
Avery, Angela	02 6030 4500	
	02 6030 4600 fax	South Eastern Australia
Ayash, Abdo	02 9823 4436	
	0414 445 733	Sydney Region
Bahnisch, L	07 5460 1457	
	07 5460 1204 fax	Australia
Baker, Andrew	03 6427 8553	
	03 6427 8554 fax	Tasmania
Barrett, Mike	02 9875 3087	
	02 9980 1662 fax	
	0407 062 494 mobile	NSW/ACT
Barth, Gail	08 8303 9580	
	08 8303 9424 fax	SA and Victoria
Baxter, Leslie	03 6224 4481	
	03 6224 4468 fax	
	0181 21943 mobile	Tasmania
Bazzani, Luigi	08 9772 1207	
	08 9772 1333 fax	Western Australia
Beal, Peter	07 3286 1488	
	07 3286 3094 fax	QLD & Northern NSW
Bennett, Malcolm	08 8973 9733	
	08 8973 9777 fax	NT, QLD, NSW, WA
Berryman, Tim	02 6272 9662 ph/fax	
	0427 894 266 mobile	ACT region
Bestow, Sue	02 6795 4695	
	02 6795 4358 fax	
	0418 953 050 mobile	Australia
Biggs, Eric	03 5023 2400	
	03 5023 3922 fax	Mildura Area
Boyd, Rodger	08 9380 2553	
	08 9380 1108 fax	Western Australia
Brouwer, Jan	03 5362 2159	
	03 5362 2187 fax	South Eastern Australia
Cairney, John	02 9685 9903	Sydney
	j.cairney@nepean.uws.edu.au	
Chowdhury, Doza	08 8303 7227	
	08 8303 7109 fax	South Australia and Victoria
Collins, David	08 9622 6100	
	08 9622 1902 fax	Central Western Wheatbelt
	0154 42694 mobile	of Western Australia
Cooper, Katharine	08 8303 6563	
	08 8303 7119 fax	Australia
Cox, Mike	07 4132 5200	
	07 4132 5253 fax	Queensland and NSW
Croft, Valerie	03 5573 0900	
	03 5571 1523 fax	Victoria
Cross, Richard	64 3 325 6400	
	64 3 325 2074 fax	New Zealand
Cruickshank, Alan	07 4160 0722	
	07 4162 3238 fax	QLD
Cunneen, Thomas	02 4889 8647	
	02 4889 8657 fax	Sydney Region
Darmody, Liz	03 9756 6105	
	03 9752 0005 fax	Australia
Davidson, James	02 6246 5071	High rainfall zone of
	02 6246 5399 fax	temperate Australia
Dawson, Iain	02 6251 2293	ACT, South East NSW
Derera, Nicholas AM	02 9639 3072	
	02 9639 0345 fax	
	0414 639 307 mobile	Australia
Downes, Ross	02 6255 1461 ph	
	02 6278 4676 fax	
	0414 955258 mobile	ACT, South East Australia
Dunstone, Bob	02 6281 1754 ph/fax	South East NSW
Easton, Andrew	07 4690 2666	
	07 4630 1063 fax	QLD and NSW
Edwards, Megan	03 5024 5960	
	03 5024 7470 fax	
	0418 532 354	VIC/NSW
Eggleton, Steve	03 9876 1097	
	03 9876 1696 fax	Melbourne Region
Fennell, John	03 5334 7871	
	03 5334 7892 fax	
	0419 881 887	Australia
FitzHenry, Daniel	02 4862 2487 ph/fax	Sydney and
	0417 891 651 mobile	surrounding districts
Fleming, Graham	03 9756 6105	
	03 9752 0005 fax	Australia
Foster, Kevin	08 9368 3670	Mediterranean areas of
		Australia
Friend, Joe	02 6688 6150 ph/fax	Northern QLD & NSW
Frkovic, Edward	02 6962 7333	
	02 6964 1311 fax	Australia
George, Doug	07 5460 1308	
	07 5460 1112 fax	Australia
Gingis, Aron	03 9887 6120	
	03 9769 1522 fax	
	0419 878658 mobile	Victoria, South Australia and
		Southern NSW
Goulden, David	64 3 325 6400	
	64 3 325 2074 fax	New Zealand
Hanger, Brian	03 9756 7532	
	03 9756 6684 fax	
	03 9752 0603 fax	
	0418 598106 mobile	Victoria
Hare, Ray	02 6763 1232	
	02 6763 1222 fax	QLD, NSW VIC & SA
Harrison, Peter	08 8948 1894 ph	Tropical/Sub-tropical
	08 8948 3894 fax	Australia, including NT, NW
	0407 034 083 mobile	of WA and tropical arid areas
Hempel, Maciej	02 4628 0376	
	02 4625 2293 fax	NSW, QLD, VIC, SA
Henry, Robert J	02 6620 3010	
	02 6622 2080 fax	Australia
Herrington, Mark	07 5441 2211	
	07 5441 2235 fax	Southern Queensland
Hill, Jeff	08 8303 9487	
	08 8303 9607 fax	South Australia
Hockings, David	07 5494 3385 ph/fax	Southern Queensland
Imrie, Bruce	02 4474 0951	
	02 4474 0952	
	imriecsc@sci.net.au	SE Australia
Iredell, Janet Willa	07 3202 6351 ph/fax	SE Queensland
Jack, Brian	08 9952 5040	
	08 9952 5053 fax	South West WA
James, Andrew	07 3214 2278	
	07 3214 2410 fax	Australia
Johnston, Margaret	07 5460 1240	
	07 5460 1455 fax	SE Queensland
Kaapro, Jyri	02 9637 8711	
	02 9637 8599 fax	Sydney and surrounding areas
Kadkol, Gururaj	03 5382 1269	
	03 5381 1210 fax	North Western Victoria
Kennedy, Peter	02 6382 7600	
	02 6382 2228 fax	New South Wales
Khan, Akram	02 9351 8821	
	02 9351 8875 fax	New South Wales
Kidd, Charles	08 8842 3591	
	08 8842 3066 fax	
	0417 336 458 mobile	Southern Australia
Kirby, Greg	08 8201 2176	
	08 8201 3015 fax	South Australia
Kirby, Neil	02 4754 2637	
	02 4754 2640 fax	New South Wales
Kirkham, Roger	03 5957 1200	
	03 5957 1210 fax	
	0153 23713 mobile	Victoria
Knights, Edmund	02 6763 1100	
	02 6763 1222 fax	North Western NSW
Kulkarni, Vinod	08 9992 2221	
	08 9992 2049 fax	Australia
Kwan, Brian	03 5943 1088	
	03 5943 1146 fax	Australia
Lake, Andrew	08 8177 0558	
	0418 818 798 mobile	
	lake@arcom.com.au	SE Australia
Lamont, Greg	02 9652 1285	
	02 9652 1924 fax	Sydney region
Langford, Garry	03 6266 4344	
	03 6266 4023 fax	
	0418 312 910 mobile	Australia
Larkman, Clive	03 9735 3831	
	03 9739 6370	
	larkman@tpgi.com.au	Victoria
Law, Mary Ann	07 4637 9960	
	07 4637 9962 fax	
	malaw@bigpond.com	Toowoomba region

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Lee, Peter	03 6330 1147	
	03 6330 1927 fax	SE Australia
Lee, Slade	02 6620 3410	Queensland/Northern
	02 6622 2080 fax	New South Wales
Lenoir, Roland	02 6231 9063 ph/fax	Australia
Leske, Richard	07 4671 3136	Cotton growing regions
	07 4671 3113 fax	of QLD & NSW
Loch, Don	07 5482 1522	
	07 5482 1529 fax	Queensland
Lowe, Greg	02 4389 8750	
	02 4389 4958 fax	
	0411 327390 mobile	Sydney, Central Coast NSW
Lubomski, Marek	07 5525 3023 ph/fax	NSW & QLD
Lullfitz, Robert	08 9447 6360	South West WA
Lunghusen, Mark	03 9752 0477	
	03 9752 0028 fax	
	0407 050 133 mobile	Melbourne & environs
Mackay, Alastair	08 9310 5342 ph/fax	
	0159 87221 mobile	Western Australia
Maddox, Zoee	03 9756 6105	
	03 9752 0005 fax	Australia
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	+64 6 877 4761 fax	New Zealand
Martin, Stephen	03 6231 2489	
	03 6231 4508 fax	
	0418 500198 mobile	Tasmania
McCarthy, Alec	08 9780 6273	
	08 9780 6136 fax	South West WA
McMichael, Prue	08 8373 2488	
	08 8373 2442 fax	SE Australia
McRae, Tony	08 8723 0688	
	08 8723 0660 fax	Australia
Miller, Jeff	64 6 356 8019 extn 8027	Manawatu region,
	64 3 351 8142 fax	New Zealand
Milner, Richard	02 6246 4169	
	02 6246 4042 fax	
	richardm@ento.csiro.au	Australia
Mitchell, Leslie	03 5821 2021	
	03 5831 1592 fax	VIC, Southern NSW
Molyneux, William	03 5965 2011	
	03 5965 2033 fax	Victoria
Morgan, Terence	07 4783 6000	
	07 4783 6001 fax	Australia
Morrison, Bruce	03 9210 9251	
	03 9800 3521 fax	East of Melbourne
Nichols, David	03 5977 4755	SE Melbourne, Mornington
	03 5977 4921 fax	Peninsula and Dandenong Ranges, Victoria
Nichols, Phillip	08 9387 7442	
	08 9383 9907 fax	Western Australia
Nutt, Bradley	08 9387 7423/	
	08 9383 9907 fax	Western Australia
Oates, John	02 4651 2601	Sydney region, Eastern
	02 4651 2578 fax	Australia
Paananen, Ian	02 4381 0051	
	02 4381 0071 fax	
	0412 826589 mobile	Sydney/Newcastle
Platz, Greg	07 4639 8817	
	07 4639 8800 fax	QLD, Northern NSW
Porter, Gavin	07 5460 1231	
	07 5460 1455 fax	SE QLD, Northern NSW
Poulsen, David	07 4661 2944	
	07 4661 5257 fax	SE QLD, Northern NSW
Prescott, Chris	03 5964 2780 ph/fax	
	0417 340 558 mobile	Victoria
Pullar, David	03 9415 1533	
	03 9419 1317 fax	
	0418 575 444 mobile	Australia
Quinn, Patrick	03 5427 0485	SE Australia
Robb, John	02 4376 1330	
	02 4376 1271 fax	
	0199 19252 mobile	Sydney, Central Coast NSW
Robinson, Ben	08 8373 2488	
	08 8373 2442 fax	SE Australia
Rose, John	07 4661 2944	
	07 4661 5257 fax	SE Queensland
Scattini, Walter	07 3356 0863 ph/fax	Tropical and sub-tropical Australia
Scholefield, Peter	08 8373 2488	
	08 8373 2442 fax	
	018 082022 mobile	SE Australia
Singh, Deo	0418 880787 mobile	
	07 3207 5998 fax	Brisbane
Slatter, John	07 4635 0726	
	07 4635 2772 fax	
	0155 88086 mobile	Australia
Smith, Kevin	03 5573 0900	
	03 5571 1523 fax	SE Australia
Smith, Stuart	03 6336 5234	
	03 6334 4961 fax	SE Australia
Snowball, Richard	08 9368 3517	Mediterranean areas of Australia
Stearne, Peter	02 9262 2611	
	02 9262 1080 fax	Sydney, ACT & NSW
Stewart, Angus	02 4385 9788ph/fax	
	0419 632 123 mobile	Sydney, Gosford
Stuart, Peter	07 4690 2666	
	07 4630 1063 fax	SE Queensland
Swane, Geoff	02 6889 1545	
	02 6889 2533 fax	
	0419 841580 mobile	Central western NSW
Swinburn, Garth	03 5023 4644	Murray Valley Region –
	03 5021 3131 fax	from Swan Hill (Vic) to Waikere (SA)
Sykes, Stephen	03 5051 3100	
	03 5051 3111 fax	Victoria
Syrus, A Kim	03 8556 2555	
	03 8556 2955 fax	Adelaide
Tan, Beng	08 9266 7168	
	08 9266 2495	Perth & environs
Tancred, Stephen	07 4681 2931	
	07 4681 4274 fax	
	0157 62888 mobile	QLD, NSW
Tay, David	07 5460 1313	
	07 5460 1112 fax	Australia
Topp, Bruce	07 4681 1255	
	07 4681 1769 fax	SE QLD, Northern NSW
Valentine, Bruce	02 6361 3919	
	02 6361 3573 fax	New South Wales
Van Der Ley, John	02 6561 5047	
	02 6561 5138 fax	Sydney to Brisbane and
	0417 423 768 mobile	New England area
Vertigan, Wayne	03 6336 5221	
	03 6334 4961 fax	Tasmania
Washer, Stewart	08 9300 9995	
	08 9407 5070 fax	
	0196 83642 mobile	Western Australia
Waters, Cathy	02 6888 7404	
	02 6888 7201 fax	SE Australia
Watkins, Phillip	08 9525 1800	
	08 9525 1607 fax	Perth Region
Westra Van Holthe, Jan	03 9706 3033	
	03 9706 3182 fax	Australia
Williams, Warren	64 6 356 8019 NZ	
	02 6356 8019 AUS	
	02 6351 8047 fax AUS	New Zealand
Wilson, Frances	64 3 318 8514	
	64 3 318 8549 fax	Canterbury, New Zealand
Winfield, Joel	03 9737 9660	Victoria
Winston, Ted	07 4068 8796 ph/fax	
	0412 534 514 mobile	QLD, Northern NSW and NT
Witherspoon, Jennifer	0407 688 457 mobile	South Australia
Worrall, Ross	02 4348 1900	
	02 4348 1910 fax	Australia
Zorin, Clara	07 3207 4306 ph/fax	
	0418 984 555	Eastern Australia

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APPENDIX 4

INDEX OF ACCREDITED NON-CONSULTANT 'QUALIFIED PERSONS'

Name
Allen, Antony
Ali, S
Baelde, Arie
Barr, Andrew
Batta, Rohitas
Beatson, Ron
Bell, David
Birmingham, Erika
Brennan, Paul
Breust, P
Brewer, L
Brindley, Tony
Buchanan, Peter
Bunker, John
Bunker, Kerry
Burton, Wayne
Cameron, Nick
Chin, Robert
Chivers, Ian
Clayton- Greene, Kevin
Coker, Julian
Constable, Greg
Cook, Esther
Cox, Michael
Craig, Andrew
Crane, Peter
Dale, Gary
Dear, Brian
de Betue, Remco
Done, Anthony
Donnelly, Peter
Downe, Graeme
Draganovic, Oliver
Eastwood, Russell
Eisemann, Robert
Elliott, Philip
Gibson, Peter
Gomme, Simon
Granger, Andrew
Green, Allan
Guy, Graeme
Hall, Nicola
Harden, Patrick
Hart, Ray
Higgs, Robert
Hill, Jeffrey
Hollamby, Gil
Holland, Mark
Hoppo, Sue
Howie, Jake
Irwin, John
Jackson, B
Jaeger, M
Johnston, Christine
Jupp, Noel
Kaehne, Ian
Katelaris, A
Kebblewhite, Tony
Kennedy, Chris
Kimbeng, Collins
Knights, Ted
Knox, Graham
Kobelt, Eric
Langbein, Sueanne
Leighton, Alan
Leonforte, Tony
Lewin, Laurence
Lewis, Hartley
Liu, Chunji
Loi, Angelo
Luckett, David
Macleod, Nick
Mann, Dorham
Mason, Lloyd
McCallum, Lesley
Mcdonald, David
Mcmaugh, P
Mendham, Neville
Menzies, Kim
Milne, Carolyn
Moody, David
Moore, Stephen
Neilson, Peter
Newman, Allen
Norriss, Michael
Oakes, John
Offord, Cathy
Oram, Rex
Patel, Narandra
Paull, Jeff
Pearce, Bob
Peppe, Ivan
Perrott, Neil
Piperidis, George
Pymer, Sally
Reid, Peter
Richardson, Maureen
Rose, Ian
Rowles, Cherie
Salmon, Alexander
Sammon, Noel
Sandral, Graeme
Sanewski, Garth
Saperstein, Sylvia
Schreuders, Harry
Scott, Ralph
Smith, Michael
Smith, Raymond
Smith, Sue
Song, Leonard
Tonks, John
Toyer, Christine
Trimboli, Daniel
Turner, Matthew
Vaughan, Peter
Weatherly, Lilia
Whalley, R.D.B.
Whiley, Tony
Williams, Rex
Wilson, Rob
Wilson, Stephen
Wirthensohn, Michelle
Wright, Gary
Yan, Guijun
Zeppa, Aldo

APPENDIX 5

ADDRESSES OF UPOV AND MEMBER STATES

International Union for the Protection of New Varieties of Plants (UPOV):

International Union for the Protection of New Varieties of Plants (UPOV)
34, Chemin des Colombettes
CH-1211
Geneva 20
SWITZERLAND

Phone: (41-22) 338 9111
Fax: (41-22) 733 0336
Web site: http://www.upov.int

Plant Variety Protection Offices in individual UPOV Member States:

ARGENTINA
Instituto Nacional de Semillas
Ministerio de Economia
Secretaria de Agricultura
Ganaderia y Pesca
Avda. Paseo Colon 922-3.
Piso, 1063 Buenos Aires

Phone: (54 11) 4349 2497
Fax: (54 11) 4349 2417
e-mail: inase@sagyp.mecon.ar

AUSTRALIA
Registrar
Plant Breeders Rights Office
GPO Box 858
Canberra ACT 2601

Phone: (61 2) 6272 3888
Fax: (61 2) 6272 3650
e-mail: pbr@affa.gov.au

AUSTRIA
Bundesamt und Forschungszentrum fur Landwirtschaft
Sortenschutzamt
Postfach 400
Spargelfeldstrasse 191
A- 1226 Wien

Phone: (43 1) 73216 4000
Fax: (43 1) 73216 4211

BELGIUM
Ministere de classes moyennes et de l'agriculture
Service de la protection des obtentions
vegetales et des catalogues nationaux
Tour WTC/3- 11eme etage
Avenue Simon Bolivar 30
B-1000 Bruxelles

Phone: (32 2) 208 37 22
Fax: (32 2) 208 37 16

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BOLIVIA
Direccion Nacional de Semillas
Secretaria Nacional De Agricultural y Ganaderia
Avda. 6 de Agosto 2006, Edif. V. Centenario
Casilla 4793
La Paz

Phone (591-2) 391 953
Fax: (591-2) 391 608
e-mail: semillas@mail.entelnet.bo

BRAZIL
Servico Nacional de Protecao de Cultivares-SNPC
(National Plant Varieties Protection Service)
Secretaria de Desenvolvimento Rural-SDR
Ministerio da Agricultura e do Abastedimento
Esplanada dos Ministerios, Bloco D, Anexo A
Terreo, Sala 1-12
CEP 70043-900, Brasilia, DF

Phone: (55-61) 218-2433
Fax: (55-61) 224 2842
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BULGARIA
Patent Office of the Republic of Bulgaria
52 B, Dr. G. M. Dimitrov Blvd.
1113 Sofia

Phone: (359-2) 710 152
Fax: (359-2) 708 325

CANADA
The Commissioner
Plant Breeders' Rights Office
Canadian Food Inspection Agency (CFIA)
3rd Floor, East Court
Camelot Court
59 Camelot Drive
Nepean, Ontario
K1A OY9

Phone: (1 613) 225 2342
Fax: (1 613) 228 6629

CHILE
Ministerio de Agricultura
Servicio Agricola y Ganadero
Departamento de Semillas
Casilla 1167-21
Santiago de Chile

Phone: (56 2) 696 29 96
Fax: (56 2) 696 64 80

CHINA
The Office for the Protection of New Varieties of Plants
Ministry of Agriculture
11 Nong Zhan Guan Nan Li
Beijing 100026

Phone: (86-10) 6419 3029
Fax: (86-10) 6419 3082
e-mail: cnpvp@agri.gov.cn

COLOMBIA
Instituto Colombiano Agropecuario (I.C.A)
Division de Semillas
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CZECH REPUBLIC
Ministry of Agriculture
Department of European Integration
Tesnov 17
117 05 Prague 1

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DENMARK
Plantenyhedsnaevnet
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Teglvaerksvej 10, Tystofte
DK-4230 Skaelskoer

Phone: (45) 53 59 61 41
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ECUADOR
Institutu Esuatoriano de la Propiedad Intelectual
Direccion Nacional de Obtenciones Vegetales
Eloy Alfaro y Amazonas
Edificio MAG, 3er piso
Quito

Phone: (593-2) 566 686
Fax: (593-2) 562 258
e-mail: sectagro@impsat.net.ec

ESTONIA
Variety Control Department
Estonian Plant Production Inspectorate
EE-71024 Viljandi

Phone: (372 4) 334 650
Fax: (372 4) 334 650
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FINLAND
Plant Variety Board
Plant Variety Rights Office
PO Box 232
00171 Helsinki

Phone: (358) 9 160 3316
Fax: (358) 9 160 2443

FRANCE
Comite de la protection des obtentions vegetales
11, rue Jean Nicot
F-75007 Paris

Phone: (331) 42 75 93 14
Fax: (331) 42 75 94 25

GERMANY
Bundessortenamt
Postfach 61 04 40
D-30604 Hannover

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HUNGARY
Hungarian Patent Office
Magyar Szabadalmi Hivatal
Garibaldi-u.2-B.P. 552
H-1370 Budapest

Phone: (36 1) 312 44 00
Fax: (36 1) 311 4841

IRELAND
Controller of Plant Breeders' Rights
Department of Agriculture and Food
Backweston
Leixlip
Co. Kildare

Phone: (353) 1 628 0608
Fax: (353) 1 628 0634
e -mail: backwest@indigo.ie

ISRAEL
Plant Breeders' Rights Council
The Volcani Center
PO Box 6
Bet-Dagan 50 250

Phone: (972) 3 968 3669
Fax: (972) 3 968 34 92
e-mail: ilpbr_tu@netvision.net.il

ITALY
Ufficio Italiano Brevetti e Marchi
Ministero dell'Industria, del Commercio e dell'Artigianato
19,via Molise
I-00187 Roma

Phone: (39 06) 47 05 1
Fax: (39 06) 47 05 30 35

JAPAN
Seeds and Seedlings Division
Agricultural Production Bureau
Ministry of Agriculture, Forestry and Fisheries
1-2-1 Kasumigaseki – Chiyoda-ku
Tokyo 100

Phone: (81 3) 35 91 05 24
Fax: (81 3) 35 02 65 72

KENYA
Plant Breeder's Rights Office
Kenya Plant Health Inspectorate Service (KEPHIS)
Headquarters
Waiyaki Way
PO Box 49592
Nairobi

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Tel: (254 –2) 44 40 29
Fax: (254-2) 44 89 40
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KYRGYZ REPUBLIC
State Agency of Intellectual Property
House 10/1, Microregion 11
720049 Bishkek

Tel: (996-3312) 510 810
Fax: (996 3312) 510 813
e-mail: kyrgyzpatent@infotel.kg

MEXICO
Servicio Nacional de Inspection y Certification de Semillas – SNICS
Secretaria de Agricultura, Ganaderia y Desarrollo Rural
Lope de Vega 125 8· Piso
Col. Chapultepec Morales
11570 México, D.F.

Phone: (52-5) 203 9427
Fax: (52-5) 250 64 83

NETHERLANDS
Raad voor het Kwekersrecht
(Board of Plant Breeder's Rights)
Postbus 104
NL-6700 AC Wageningen

Phone: (31 317) 47 80 90
Fax: (31 317) 42 58 67
e-mail:
raad.kwekersrecht@rkr.agro.nl

NEW ZEALAND
Commissioner of Plant Variety Rights
Plant Variety Rights Office
PO Box 130
Lincoln, Canterbury

Phone: (64 3) 325 63 55
Fax: (64 3) 325 29 46

NORWAY
Plantesortsnemnda
(The Plant Variety Board)
Frokontrollen
N-1432 As

Phone: (47) 64 94 75 04
Fax: (47) 64 94 02 08

PANAMA
Direccion General del Registro de la Propiedad Industrial (DIGERPI)\
Ministerio de Comercio e Industrias
Apartado 9658- Zona 4
Panama 4

Phone: (507) 227 3987
Fax: (507) 227 2139
e-mail: digerpi@sinfo.net

PARAGUAY
Ministerio de Agricultura y Ganaderia
Direccion de Semillas (DISE)
Gaspar R. de Francia No. 685
c/ Mcal. Estigarribia
San Lorenzo

Phone: (595) 21 58 22 01
Fax: (595) 21 58 46 45

POLAND
Research Center of Cultivar Testing (COBORU)
63-022 Slupia Wielka

Phone: (48 61) 285 2341
Fax: (48 61) 285 3558
e-mail: coboru@bptnet.pl

PORTUGAL
Centro Nacional de Registo de Variedades Protegidas (CENARVE)
Edificio II da DGPC
Tapada da Ajuda
P-1300 Lisboa

Phone: (351 213) 613 216
Fax: (351 213) 613 222
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REPUBLIC OF MOLDOVA
State Commission for Crops Variety Testing and Registration
Ministry of Agriculture
Bul. Stefan Cel Mare 162
C.P. 1873
2004 Chisinau

Phone: (373-2) 24 62 22
Fax: (373-2) 24 69 21

RUSSIAN FEDERATION
State Commission of the Russian Federation
for Selection Achievements Test and Protection
Orlicov per., 1/11
107139 Moscow

Phone: (70-95) 204 49 26
Fax: (70-95) 207 86 26
e-mail: desel@agro.aris.ru

SLOVAKIA
Ministry of Agriculture
Dodrovicova 12
812 66 Bratislava

Phone: (421 7) 306 62 90
Fax: (421 7) 306 62 94

SLOVENIA
Plant Variety Protection and Registration Office
Parmova 33
1000 Ljubljana

Phone: (386-61) 436 3344
Fax: (386-61) 436 3312
e-mail: UVRSR@gov.si

SOUTH AFRICA
The Registrar
National Department of Agriculture
Directorate Genetic Resources
PO Box 25322
Gezina 0031

Phone: (27 12) 808 0365
Fax: (27 12) 808 0365
e-mail: variety.control@nda.agric.za

SPAIN
Oficina Espanola de Variedades Vegetales (OEVV)
Instituto Nacional de Investigacion y Tecnologia
Agraria y Alimentaria
Ministerio de Agricultura, Pesca y Alimentacion
Jose Abascal, 4-7ª pl.
E-28003- Madrid

Phone: (34 91) 347 66 00
Fax: (34 91) 594 27 68

SWEDEN
Statens vaxtsortnamnd
National Plant Variety Board
Box 1247
S-171 24 Solna

Phone: (46) 8 783 12 60
Fax: (46) 8 833 170
e-mail: info@vaxtsortnamnden

SWITZERLAND
Bundesamt fur Landwirtschaft
Buro fur Sortenschutz
Mattenhofstr. 5
CH-3003 Bern

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Fax: (41 31) 322 26 34

TRINIDAD AND TOBAGO
Controller (Ag)
Intellectual Property Office
Ministry of Legal Affairs
34 Frederick Street
Port of Spain

Tel: (1 868) 625 9972
Fax: (1 868) 624 1221
e-mail:
Controller.IPOffice@opus.co.tt

UKRAINE
State Patent Office of Ukraine
8 Lvov Square
254655 Kiev 53, GSP- 655

Phone: (880 44) 212 50 82
Fax: (880 44) 212 34 49

UNITED KINGDOM
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White House Lane
Huntingdon Road
Cambridge CB3 OLF

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Phone: (44 1223) 34 23 81
Fax: (44 1223) 34 23 86

UNITED STATES OF AMERICA
(For PVP)
The Commissioner
Plant Variety Protection Office
Agricultural Marketing Service
Department of Agriculture
Beltsville, Maryland 20705-2351

Phone: (1 301) 504 55 18
Fax: (1 301) 504 52 91

(For Plant Patent)
The Commissioner of Patents and Trademarks
Patent and Trade Mark Office
Box 4
Washington DC 20231

Phone: (1 703) 305 93 00
Fax: (1 703) 305 88 85

URUGUAY
Instituto Nacional de Semillas (INASE)
Casilla de Correos 7731
Pando Canelone

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Fax: (59 82) 288 7077
e-mail: inasepre@adinet.com.uy

EUROPEAN UNION
(for applications filed within the EU)

Community Plant Variety Office
P.O. Box 2141
F-49021 Angers Cedex 02
FRANCE

Phone: (33 2) 41 25 64 32
Fax: (33 2) 41 25 64 10

CURRENT STATUS OF PLANT VARIETY PROTECTION LEGISLATURE IN UPOV MEMBER COUNTRIES

Argentina[2]
Australia[3]
Austria[2,4]
Belgium[1,4]
Bolivia[2]
Brazil[2]
Bulgaria[3]
Canada[2]
Chile[2]
China[2]
Columbia[2]
Czech Republic[2]
Denmark[3,4]
Ecuador[2]
Finland[2,4]
France[2,4]
Germany[3,4]
Hungary[2]
Ireland[2,4]
Israel[3]
Italy[2,4]
Japan[3]
Kenya[2]
Kyrgyz Republic[3]
Mexico[2]
Netherlands[3,4]
New Zealand[2]
Norway[2]
Panama[2]
Paraguay[2]
Poland[2,5]
Portugal[2,4]
Republic of Estonia[3]
Republic of Moldova[3]
Russian Federation[3]
Slovakia[2,5]
Slovenia[5]
South Africa[2,5]
Spain[1,4]
Sweden[3,4]
Switzerland[2]
Trinidad and Tobago[2]
Ukraine[2]
United Kingdom[3,4]
USA[3]
Uruguay[2]
(Total 46)

1 Bound by the 1961 Act as amended by the Additional Act of 1972.
2 Bound by the 1978 Act.
3 Bound by the 1991 Act.
4 Member of the European Community which has introduced a (supranational) Community plant variety rights system based upon the 1991 Act.
5 Has already amended its law to conform to the 1991 Act; most other states are in the process of doing so.

APPENDIX 6

CENTRALISED TESTING CENTRES

Under Plant Breeder's Rights Regulations introduced in 1996, establishments may be officially authorised by the PBR office to conduct test growings. An authorised establishment will be known as Centralised Test Centre (CTC).

Usually, the implementation of PBR in Australia relies on a 'breeder testing' system in which the applicant, in conjunction with a nominated Qualified Person (QP), establishes, conducts and reports a comparative trial. More often than not, trials by several breeders are being conducted concurrently at different sites. This makes valid comparisons difficult and often results in costly duplication.

While the current system is and will remain satisfactory, other optional testing methods are now available which will add flexibility to the PBR process.

Centralised Testing is one such optional system. It is based upon the authorisation of private or public establishments to test one or more genera of plants. Applicants can choose to submit their varieties for testing by a CTC or continue to do the test themselves. Remember, using a CTC to test your variety is voluntary.

The use of CTCs recognises the advantages of testing a larger number of candidate varieties (with a larger number of comparators) in a single comprehensive trial. Not only is there an increase in scientific rigour but there are substantial economies of scale and commensurate cost savings. A CTC will establish, conduct and report each trial on behalf of the applicant.

The PBR office has amended its fees so that cost savings can be passed to applicants who choose to test their varieties in a CTC. Accordingly, when 5 or more candidate varieties of the same genus are tested simultaneously, each will qualify for the CTC examination fee of $800. This is a saving of nearly 40% over the normal fee of $1400.

Trials containing less than 5 candidate varieties capable of being examined simultaneously will not be considered as Centralised test trials regardless of the authorisation of the facility. Candidate varieties in non-qualifying small trials will not qualify for CTC reduction of examination fees.

Establishments wishing to be authorised as a CTC may apply in writing to the PBR office outlining their claims against the selection criteria. Initially, only one CTC will be authorised for each genus. Exemptions to this rule can be claimed due to special circumstances, industry needs and quarantine regulations. Authorisations will be reviewed periodically.

Authorisation of CTCs is not aimed solely at large research institutions. Smaller establishments with appropriate facilities and experience, can also apply for CTC status. There is no cost for authorisation as a CTC.

APPLICATIONS FOR AUTHORISATION AS A 'CENTRALISED TESTING CENTRE'

Establishments interested in gaining authorisation as a Centralised Testing Centre should apply in writing addressing each of the Conditions and Selection Criteria outlined below.

Conditions and Selection Criteria
To be authorised as a CTC, the following conditions and criteria will need to be met:

Appropriate facilities
While in part determined by the genera being tested, all establishments must have facilities that allow the conduct and completion of moderate to large scale scientific experiments without undue environmental influences. Again dependent on genera, a range of complementary testing and propagation facilities (e.g. outdoor, glasshouse, shadehouse, tissue culture stations) is desirable.

Experienced staff
Adequately trained staff, and access to appropriately accredited Qualified Persons, with a history of successful PVR/PBR applications will need to be available for all stages of the trial from planting to the presentation of the analysed data. These staff will require the authority to ensure timely maintenance of the trial. Where provided by the PBR office, the protocol and technical guidelines for the conduct of the trial must be followed.

Substantial industry support
Normally the establishment will be recognised by a state or national industry society or association. This may include/be replaced by a written commitment from major nurseries or other applicants, who have a history of regularly making applications for PBR in Australia, to use the facility.

Capability for long term storage of genetic material
Depending upon the genus, a CTC must be in a position to make a long term commitment to collect and maintain, at minimal cost, genetic resources of vegetatively propagated species as a source of comparative varieties. Applicants indicating a willingness to act as a national genetic resource centre in perpetuity will be favoured.

Contract testing for 3rd Parties
Unless exempted in writing by the PBR office operators of a CTC must be prepared to test varieties submitted by a third party.

Relationship between CTC and 3rd Parties
A formal arrangement between the CTC and any third party including fees for service will need to be prepared and signed before the commencement of the trial. It will include among other things: how the plant material will be delivered (e.g. date, stage of development plant, condition etc); allow the applicant and/or their agent and QP access to the site during normal working hours; and release the use of all trial data to the owners of the varieties included in the trial.

One trial at a time
Unless exempted in writing by the PBR office, all candidates and comparators should be tested in a single trial.

One CTC per genus

Normally only one CTC will be authorised to test a genus. Special circumstances may exist (environmental factors, quarantine etc) to allow more than one CTC per genus, though a special case will need to be made to the PBR office. More than one CTC maybe allowed for roses.

One CTC may be authorised to test more than one genus. Authorisations for each genus will be reviewed periodically.

Authorised Centralised Test Centres (CTCs)

Following publication of applications for accreditation and ensuing public comment, the following organisations/individuals are authorised to act as CTCs. Any special conditions are also listed.

Name	Location	Approved Genera	Facilities	Name of QP	Date of accreditation
Agriculture Victoria, National Potato Improvement Centre	Toolangi, VIC	Potato	Outdoor, field, greenhouse, tissue culture laboratory	R Kirkham G Wilson	31/3/97
Bureau of Sugar Experiment Stations	Cairns, Tully, Ingham, Ayr, Mackay, Bundaberg, Brisbane QLD	*Saccharum*	Field, glasshouse, tissue culture, pathology	M Cox	30/6/97
Ag-Seed Research	Horsham and other sites	Canola	Field, glasshouse, shadehouse, laboratory and biochemical analyses	G Kadkol	30/6/97
Agriculture Western Australia	Northam WA	Wheat	Field, laboratory	D Collins	30/6/97
University of Sydney, Plant Breeding Institute	Camden, NSW	*Argyranthemum, Diascia, Mandevilla*, Oats	Outdoor, field, . irrigation, greenhouses with controlled micro-climates, controlled environment rooms, tissue culture, molecular genetics and cytology lab	J Oates	30/6/97
Boulters Nurseries Monbulk Pty Ltd	Monbulk, VIC	Clematis	Outdoor, shadehouse, greenhouse	M Lunghusen	30/9/97
Geranium Cottage Nursery	Galston, NSW	Pelargonium	Field, controlled environment house	I Paananen	30/11/97
Agriculture Victoria	Hamilton, VIC	*Perennial ryegrass, tall fescue, tall wheat grass, white clover, persian clover*	Field, shadehouse, glasshouse, growth chambers. Irrigation. Pathology and tissue culture. Access to DNA and molecular marker technology. Cold storage.	V Gellert M Anderson	30/6/98
Koala Blooms	Monbulk, VIC	*Bracteantha*	Outdoor, irrigation	M Lunghusen	30/6/98
Redlands Nursery	Redland Bay, QLD	*Aglaonema*	Outdoor, shadehouse, glasshouse and indoor facilities	K Bunker	30/6/98
Protected Plant Promotions	Macquarie Fields, NSW	New Guinea Impatiens including *Impatiens hawkeri* and its hybrids	Glasshouse	I Paananen	30/9/98
University of Queensland, Gatton College	Lawes, QLD	Some tropical pastures	Field, irrigation, glasshouse, small phytotron, plant nursery & propagation, tissue culture, seed and chemical lab, cool storage	D Hanger	30/9/98
Jan and Peter Iredell	Moggill, QLD	Bougainvillea	Outdoor, shadehouse	J Iredell	30/9/98

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Protected Plant Promotions	Macquarie Fields, NSW	*Verbena*	Glasshouse	I Paananen	31/12/98
Avondale Nurseries Ltd	Glenorie, NSW	*Agapanthus*	Greenhouse, tissue culture with commercial partnership	I Paananen	31/12/98
Paradise Plants	Kulnura, NSW	*Camellia, Lavandula, Osmanthus, Ceratopetalum*	Field, glasshouse, shadehouse, irrigation, tissue culture lab	J Robb	31/12/98
Prescott Roses	Berwick, VIC	*Rosa*	Field, controlled environment greenhouses	C Prescott	31/12/98
F & I Baguley Flower and Plant Growers	Clayton South, VIC	*Euphorbia*	Controlled glasshouses, quarantine facilities, tissue culture	G Guy	31/3/99
Paradise Plants	Kulnura, NSW	*Limonium, Raphiolepis, Eriostemon, Lonicera, Jasminum*	Field, glasshouse, shadehouse, irrigation, tissue culture lab	J Robb	
Ramm Pty Ltd	Macquarie Fields, NSW	*Angelonia*	Glasshouse	I Paananen	
Carol's Propagation	Alexandra Hills, QLD	*Cuphea*	Field beds, wide range of comparative varieties	C Milne	
Queensland Department of Primary Industries Redlands Research Station	Cleveland, QLD	*Cynodon, Zoysia* and other selected warm season-season turf and amenity species	Field, glasshouse, irrigation, tissue culture lab	D Loch	30/9/00

The following applications are pending:

Name	**Location**	**Genera applied for**	**Facilities**	**Name of QP**
Luff Partnership	Kulnura, NSW	*Bracteantha*	Field beds, irrigation, shade house, propagation house, cool rooms	I Dawson
Ramm Pty Ltd	Macquarie Fields, NSW	*Petunia, Calibrachoa*	Glasshouse	I Paananen
Outeniqua Nursery	Monbulk, VIC	Unspecified	Outdoor, glasshouse	
University of Queensland, Gatton College	Lawes, QLD	Ornamental & bedding sp., wheat, millet, *Prunus, Capsicum, Glycine, Ipomea, Vigna*, *Lycopersicon,* Asian vegetables, Tropical fruits, *Solanum*	Field, irrigation, glasshouse, small phytotron, plant nursery & propagation, tissue culture, seed and chemical lab, cool storage	L Bahnisch R Fletcher D George M Johnston G Lewis G Porter D Tay A Wearing D Hanger

Comments (both for or against) either the continued accreditation of a CTC or applications to become a CTC are invited. Written comments are confidential and should be addressed to:

The Registrar
Plant Breeders Rights Office
PO Box 858
CANBERRA ACT 2601
Fax (02) 6272 3650

Closing date for comment: 15 December 2000.

APPENDIX 7

LIST OF CLASSES FOR VARIETY DENOMINATION PURPOSES[1]

As amended by the Council at its twenty-fifth ordinary session, on October 25, 1991.

[Recommendation 9

For the purposes of the fourth sentence of Article 13(2) of the Convention, all taxonomic units are considered closely related that belong to the same botanical genus or are contained in the same class in the list in Annex I to these Recommendations.]

Note: Classes which contain subdivisions of a genus may lead to the existence of a complementary class containing the other subdivisions of the genus concerned (example: Class 9 (Vicia faba) leads to the existence of another class containing the other species of the genus Vicia).*

Class 1: Avena, Hordeum, Secale, x Triticosecale, Triticum

Class 2: Panicum, Setaria

Class 3: Sorghum, Zea

Class 4: Agrostis, Alopecurus, Arrhenatherum, Bromus, Cynosurus, Dactylis, Festuca,Lolium, Phalaris, Phleum, Poa, Trisetum

Class 5: Brassica oleracea, Brassica chinensis, Brassica pekinensis

Class 6: Brassica napus, B. campestris, B. rapa, B. juncea, B. nigra, Sinapis

Class 7: Lotus, Medicago, Ornithopus, Onobrychis, Trifolium

Class 8: Lupinus albus L., L. angustifolius L., L. luteus L.

Class 9: Vicia faba L.

Class 10: Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima

Class 11: Beta vulgaris ssp. vulgaris var. conditiva Alef. (syn.: Beta vulgaris L. var. rubra L.), Beta vulgaris L. var. cicla L., Beta vulgaris L. ssp. vulgaris var. vulgaris

Class 12: Lactuca, Valerianella, Cichorium

Class 13: Cucumis sativus

Class 14: Citrullus, Cucumis melo, Cucurbita

Class 15: Anthriscus, Petroselinum

Class 16: Daucus, Pastinaca

Class 17: Anethum, Carum, Foeniculum

Class 18: Bromeliaceae

Class 19: Picea, Abies, Pseudotsuga, Pinus, Larix

Class 20: Calluna, Erica

Class 21: Solanum tuberosum L.

Class 22: Nicotiana rustica L., N. tabacum L.

Class 23: Helianthus tuberosus

Class 24: Helianthus annuus

Class 25: Orchidaceae

Class 26: Epiphyllum, Rhipsalidopsis, Schlumbergera, Zygocactus

Class 27: Proteaceae

COMPLEMENTARY CLASSES

Class 28: Species of Brassica other than
(in Class 5 + 6) Brassica oleracea, Brassica chinensis, Brassica pekinensis + Brassica napus, B. campestris, B. rapa, B. juncea, B. nigra, Sinapis

Class 29: Species of Lupinus other than
(in Class 8) Lupinus albus L., L. angustifolius L., L. luteus L.

Class 30: Species of Vicia other than
(in Class 9) Vicia faba L.

Class 31: Species of Beta + subdivisions of the species Beta vulgaris other than (in Class 10 +11) Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima + Beta vulgaris ssp. vulgaris var. conditiva Alef. (syn.: Beta vulgaris L. var. rubra L.), Beta vulgaris L. var. cicla L., Beta vulgaris L. ssp. vulgaris var. vulgaris

Class 32: Species of Cucumis other than
(in Class 13 + 14) Cucumis sativus + Citrullus, Cucumis melo, Cucurbita

Class 33: Species of Solanum other than
(in Class 21) Solanum tuberosum L.

Class 34: Species of Nicotiana other than
(in Class 22) Nicotiana rustica L., N. tabacum L.

Class 35: Species of Helianthus other than
(in Class 23 + 24) Helianthus tuberosus + Helianthus annuus

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* The complementary classes have been added by the Office of the Union for the convenience of the reader and are given the numbers 28 to 35.

1 From UPOV RECOMMENDATIONS ON VARIETY DENOMINATIONS, Adopted by The Council of UPOV on October 16, 1987, and amended on October 25, 1991

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APPENDIX 8

REGISTER OF PLANT VARIETIES

Register of Plant Varieties contains the legal description of the varieties granted Plant Breeder's Rights. Under section 62(1) of the *Plant Breeder's Rights Act 1994* a person may inspect the Register at any reasonable time. Following are the contact details for registers kept in each state and territories.

South Australia
Ms Lisa Halskov
AQIS
8 Butler Street
PORT ADELAIDE SA 5000
Phone 08 8305 9706

Western Australia
Mr Geoffrey Wood
AQIS
Level, Wing C
Market City
280 Bannister Road
CANNING VALE WA 6154
Phone 08 9311 5407

New South Wales
Mr. Alex Jabs
General Services
AQIS
2 Hayes Road
ROSEBERY NSW 2018
Phone 02 9364 7293

Victoria and Tasmania
Mr. Colin Hall
AQIS
Building D, 2nd Floor
World Trade Centre
Flinders Street
MELBOURNE VIC 3005
Phone 03 9246 6810

Queensland
Mr. Ian Haseler
AQIS
2nd Floor
433 Boundary Street
SPRING HILL QLD 4000
Phone 07 3246 8755

Australian Capital Territory and Northern Territory
ACT and NT Registers are kept
in the Library of PBR Office in Canberra
Phone 02 6272 4228

APPENDIX 9

Common Name to Botanical Name Index
For varieties included in this issue

COMMON NAME	BOTANICAL NAME
Agapanthus	*Agapanthus inapertus* x *Agapanthus orientalis*
	Agapanthus orientalis
	Agapanthus praecox ssp *orientalis*
Alfalfa	*Medicago sativa*
Alstroemeria	*Alstroemeria* hybrid
Apple	*Malus domestica*
Avocado	*Persea americana*
Azalea	*Rhododendron hybrid*
	Rhododendron simsii
Baby' s Breath	*Gypsophila paniculata*
Barley	*Hordeum vulgare*
Box Honeysuckle	*Lonicera nitida*
Camellia	*Camellia sasanqua*
Canola	*Brassica napus* var *oleifera*
Cape Daisy	*Osteospermum ecklonis*
Chrysanthemum	*Chrysanthemum* x *multiflorum*
Cocksfoot	*Dactylis glomerata*
Columnia	*Columnia hybrid*
Common Vetch	*Vicia sativa*
Cotton	*Gossypium hirsutum*
Crimson Clover	*Trifolium incarnatum*
Diascia	*Diascia* hybrid
Disc Medic	*Medicago littoralis* x *Medicago tornata*
Easter Daisy	*Aster* hybrid
European Pear	*Pyrus communis*
Everlasting Daisy	*Bracteantha bracteata*
False Sarsparilla	*Hardenbergia violacea*
Field Bean	*Vicia faba*
Field Pea	*Pisum sativum*
Flannel Flower	*Actinotus helianthi*
Gaura	*Gaura lindheimeri*
Geraldton Wax	*Chamelaucium uncinatum*
Hibiscus	*Hibiscus syriacus*
Impatiens	*Impatiens hawkeri*
Italian Lavender	*Lavandula stoechas*
Italian Ryegrass	*Lolium multiflorum*
Ivy Pelargonium	*Pelargonium peltatum*
Japanese Plum	*Prunus salicina*
Kangaroo Paw	*Anigozanthos* hybrid
Kiwifruit	*Actinidia deliciosa*
Koala Fern	*Caustis blakei subsp. macrantha*
Lavender	*Lavandula hybrid*
	Lavandula stoechas ssp *pedunculata*
Leucadendron	*Leucadendron uliginosum* x *Leucadendron discolor*
Lilly Pilly	*Syzygium australe*
Lily	*Lilium* hybrid
Limonium	*Limonium* hybrid
Lucerne	*Medicago sativa*
Mandevilla	*Mandevilla sanderi*
Mango	*Mangifera indica*
Matrush	*Lomandra spicata*

COMMON NAME	BOTANICAL NAME
Mimusops	*Mimusops elengi*
Miniature Rose	*Rosa* hybrid
Mushroom	*Cantharellus cibarius*
Nectarine	*Prunus persica* var *nucipersica*
Nemesia	*Nemesia* hybrid
Neoregelia	*Neoregelia* hybrid
New Guinea Hybrid Impatiens	*Impatiens* hybrid
New South Wales Christmas Bush	*Ceratopetalum gummiferum*
Ornamental Strawberry	*Fragaria* x *Potentilla* hybrid
Pear Rootstock	*Pyrus communis*
Pelargonium	*Pelargonium* x*hortorum* *Pelargonium tricolor*
Perennial Ryegrass	*Lolium perenne*
Petunia	*Petunia* hybrid
Plumcot	*Prunus domestica* x *Prunus armeniaca*
Poinsettia	*Euphorbia pulcherrima*
Potato	*Solanum tuberosum*
Pumpkin	*Cucurbita maxima*
Rose	*Rosa* hybrid
Sea Parsley	*Apium prostratum*
Slender Mint	*Mentha diemenica*
Snapdragon	*Antirrhinum* hybrid
Solidago	*Solidago* hybrid
Soybean	*Glycine max*
Strawberry	*Fragaria* x*ananassa*
Subterranean Clover	*Trifolium subterraneum*
Sugarcane	*Saccharum* hybrid
Sutera	*Sutera cordata*
Sweet Cherry	*Prunus avium*
Syngonium	*Syngonium podophyllum*
Tall Fescue	*Festuca arundinacea*
Tea Tree	*Leptospermum* hybrid
Torenia	*Torenia* hybrid
Turf Tall Fescue	*Festuca arundinacea*
Verbena	*Verbena* hybrid
Vireya Rhododendron	*Rhododendron vireya* hybrid
Waxflower (long-leaved)	*Philotheca myoporoides*
Waxflower Hybrid	*Chamelaucium* hybrid *Chamelaucium* hybrid *Chamelaucium uncinatum* x *Chamelaucium megalopetalum*
Wheat	*Triticum aestivum*
White Clover	*Trifolium repens*
Zonal Pelargonium	*Pelargonium zonale*
Zygocactus	*Schlumbergera* hybrid *Schlumbergera truncata*

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Register of Australian Winter Cereal Cultivars

Varietal Descriptions from the Voluntary Scheme for the Registration of Cereal Cultivars

Recently some procedural changes have been implemented in the operations of the Voluntary Cereal Registration Scheme. The Plant Breeder's Rights (PBR) office and the Voluntary Cereal Registration Scheme are collaborating to ensure that descriptions of new varieties, whether they are protected by PBR or not, are made available.

The *Plant Varieties Journal* now includes descriptions of cultivars registered under the Voluntary Cereal Registration Scheme. **Please note that publishing a description in the *Plant Varieties Journal* does not automatically qualify a cultivar to be protected under Plant Breeder's Rights (PBR). PBR is entirely a different scheme and there are specific requirements under the *Plant Breeder's Rights Act 1994* which must be satisfied to be eligible for registration under PBR.** However, it is possible that some cultivars published in this section of the journal are also registered under PBR. When a cultivar is registered under both schemes, the current PBR status of the cultivar is indicated in the descriptions.

A Check list for Registering New Cereal Cultivars in the Voluntary Scheme

Breeders considering submitting a new variety to the voluntary scheme should:

1. Clear the proposed name with Australian Winter Cereal Collection (AWCC). The AWCC will query available information systems to ensure that the proposed name will not be confused with other cultivars of the same group and issue a **registration number**. The timeframe for this process will usually be less than 24 hours, and can be done by phone, fax or by e-mail.

2. Complete a **registration form,** including the registration number and forward the form to the Voluntary Cereal Registration Scheme **–** either by an e-mail attachment or by ordinary mail on a 3.5 inch a IBM formatted floppy diskette. The breeders will be notified of the acceptance for a new registration within one week of its receipt.

3. Send an *untreated* one kilogram (1 kg) reference (or type) **sample of seed** to the Voluntary Cereal Registration Scheme for long term storage in the AWCC. Please indicate if there are any restrictions on the distribution of this seed. Unless advised to the contrary it will be assumed that seed samples of registered cultivars can be freely distributed by the AWCC to *bona fide* scientists for research purposes.

4. Provide a **description of the new cultivar** for publication in the *Plant Varieties Journal* and send it to the Voluntary Cereal Registration Scheme in Word for Windows or in RTF format **–** either by an e-mail attachment or by ordinary mail on a 3.5 inch a IBM formatted floppy diskette. In general, a description should contain the following headings:

- Common name
- Botanical name
- Cultivar name
- Registration number
- Registration date
- Name and address of Originators
- Name and address of Registrar of Cereal Cultivars
- Released by
- Synonyms (if any)
- Parentage
- Breeding and selection
- Morphology
- Disease Reaction
- Yield
- Quality
- PBR Status (if any)
- Acknowledgment(if any)
- Breeder

In addition, you may also include other headings if they are relevant to the description of the variety. Please follow the general style and format of the descriptions published in the current issue. Please note: always format your description in a single column, **do not format in two columns**. Columns will be formatted during the publication process.

The **Voluntary Cereal Registration Scheme** will electronically forward your description to the *Plant Varieties Journal* for publication. *Plant Varieties Journal* reserves the right for editorial corrections and the edited versions will be forwarded to the breeder for review before the final publication. Publication cost will be charged on a cost recovery basis with invoices sent directly from the PBR office to the breeder. The nominal cost will be $400.00 (four hundred dollars) per variety.

There is no descriptions from the Voluntary Cereal Registration Scheme included in this issue.

Contact information

Registration

Voluntary Cereal Registration Scheme
C/- Australian Winter Cereals Collection
RMB 944, Calala Lane
TAMWORTH NSW 2340

Phone: (02) 6763 1149
Fax: (02) 6763 1154
e-mail: mackaym@agric.nsw.gov.au

Publication

Registrar PBR
Plant Breeder's Rights Office
GPO Box 858
CANBERRA ACT 2601

Phone: (02) 6272 4228
Fax: (02) 6272 3650
e-mail: Doug.Waterhouse@affa.gov.au

SERVICE DIRECTORY

ADVERTISE YOUR NEW VARIETY OR SERVICES IN THE

Plant Varieties Journal

Plant Breeders and their agents are invited to take this opportunity to promote their new plant varieties by advertising in the Plant Varieties Journal. Consultant Qualified Persons are also invited to advertise their services. The Journal is well circulated throughout the horticultural and agricultural industry. Advertising in the Journal will promote the commercialisation of new plant varieties and the services offered by the qualified persons. Our policy is to promote the varieties which are currently in the PBR scheme and the services of those who are currently accredited by the PBR office.

The Journal also has a Service Directory. This Directory is suitable for advertising the services provided by Consultant Qualified Persons, Agents, Patent Attorneys, CTC sites or photographers.

Advertising is available at a casual space rate as well as a four times rate, attracting a considerable discount of 25%! Advertisements will be published on the back cover or inside front and back covers. The front cover is restricted to full colour photographs of a PBR variety.

Advertising Rates (incl GST)

			Casual	**4 issues**
Front Cover	(Full Page only)	Colour	$1193.00	$3579.00
Back Cover	(Full Page)	Colour	894.00	684.00
	(Full Page)	Mono	596.00	1790.00
Inside Front Cover	(Full Page)	Mono	477.00	1431.00
	(Half Page)	Mono	298.00	894.00
Inside Back Cover	(Full Page)	Mono	357.00	1073.00
	(Half Page)	Mono	239.00	716.00
Service Directory	(6cm x 6cm)	Mono	60.00 per spot	

For bookings or further information please contact Kathryn Dawes-Read on 02 6272 4338, fax 02 6272 3650 or email Kathryn.Dawes-Read@affa.gov.au

Plant Breeder's Rights

In industry, product innovation can give you the competitive edge but you need to protect your investment to ensure a sustainable return.

Plant Breeder's Rights (PBR) are a form of intellectual property that allow breeders to decide how their new varieties are to be distributed and marketed.

Varieties protected by PBR may only be produced for sale or sold by growers, distributors and retailers licensed by the plant breeder.

If you would like more information about your rights as a plant breeder, please contact:

Plant Breeder's Rights
Department of Agriculture, Fisheries and Forestry – Australia
GPO Box 858 CANBERRA ACT 2601

Or you can visit our website:
www.affa.gov.au/pbr

Telephone: (02) 6272 4228
Facsimile: (02) 6272 3650

PBR Australia – protecting your investment.

PBR
Australia