

The Trial of Miscanthus (1998-2003)

In 1994 the RHS Floral Trials Committee started to plan a programme of perennial grass trials. It was decided that the first should be of *Miscanthus*, a major genus of ornamental grasses, with many new cultivars from Europe and the USA coming on to the market. As with many RHS trials this was to highlight a trend, in this case, the increased use of ornamental grasses for garden decoration.





Objectives

Award of Garden Merit Σ : By bringing together as many different taxa as possible and assessing their merits, the committee could recommend the Award of Garden Merit to those considered the best for the general gardener.

Correct Names: Although many entries were new cultivars, some queries regarding identity and nomenclature were already known to exist. For instance, we were keen to observe *M. sinensis* 'Ferner Osten' and *M. sinensis* 'China'; *M. sinensis* 'Strictus' and *M. sinensis* 'Zebrinus'; and a widely available grass known as *Miscanthus floridulus*.

Archive: To create a permanent record through detailed descriptions, images and herbarium specimens for future reference.

Entries: In spring 1997, a comprehensive list of plants required was compiled using the RHS Horticultural Database against which possible retail nursery sources were drawn up (using the *The RHS Plant Finder*, the European *PPPI* and the US *Andersen* lists). Other sources such as The Royal Botanic Gardens, Kew, RHS Gardens, wholesale nurseries and private gardens were also invited to submit entries. Senders to this trial are listed on page 11.

In spring 1998 three plants (two, in the case of the very large taxa) of each entry were planted. There were 117 entries in the trial, 12 of which were duplicates. All plants in RHS Trials remain the property of the sender, so at the end of the trial they were either returned, donated to the RHS Gardens (or a third party), or destroyed.

Cultivation of the trial

The plants were grown on a site in Wisley village, that had been brought back into cultivation from farm pasture by being rotovated and a general fertiliser applied at 56g/sq.m. The soil is light and sandy with a pH 6.5. Each March, the plants were cut down to soil level (except *M. transmorrisonensis*, it being the only evergreen in the trial). Most of the plants (except those of dwarf habit) grew so well in the first two years that one plant of each entry was removed to give more space. The trial site has a high water table and was flooded in the winter 2000/2001, which had no effect on the plants. It was reported that in areas of high rainfall many of the cultivars would not flower well. Cultivars of small habit, that had not performed well in the original site, were re-planted on a site in the Trials Field in the main garden at Wisley in 2002-2003 for further assessment.

Records

Height and spread were recorded, as was date of flowering. Other records included habit; colour of inflorescence; colour of foliage in summer and winter.

People involved

Floral Trials Committee (see page 11) met 16 times (from 1999-2001 and in 2003)

Co-opted member: Roger Grounds of Apple Court Nursery was co-opted to the trials committee and gave valuable background information and advice from his long experience with growing grasses in general and *Miscanthus* in particular.

Others: Ernst Pagels was approached by the Trials Office, at his nursery in Leer, Germany, and in response not only submitted a great number of cultivars from his own raising and selection, but also gave invaluable notes on their characteristics. Greg Speichert of Crystal Palace Perennials, Indiana, USA, visited the trial and advised on the characteristics and provenance of some of the US cultivars. Mary Thorp of the Royal Botanic Gardens, Kew, who was responsible for the grass borders at Kew, organized the submissions of entries from Kew and advised on their cultivation and performance.







Roger Grounds

Front cover: Miscanthus sinensis 'Strictus' (Photo: Tim Sandall)

Findings

Miscanthus in the trial demonstrated their great variety in size and habit, as well as the long seasonal interest from the colour of the leaves to the varying shape and form of the flowering heads. Use in the garden could be visualised from those able to form large screens of rustling leaves to others that could make a dramatic statement as a specimen with their strong foliage and/or their flowers heads catching the light and the wind. Others were obvious candidates for looking good in a pot or large container. Their performance during the late autumn and even through the winter with their shifting silhouettes and pale colouring was particularly noteworthy.

It was known that both species and cultivars are, in general, easy plants to grow, tolerating different soils, requiring no fertiliser, being fully hardy, and, being clump-forming (with one or two exceptions), are not invasive in the UK. Though most will tolerate some shade, all benefit from full sun to obtain good flowering. Most cultivars can be left *in situ* for 3 years, thereafter they can be easily split. The only maintenance is the cutting down of the old stems in spring.

It was demonstrated in the trial that any propagation or splitting should take place in spring or early summer, before re-growth starts. The outer sections (minimum 15cm/6" in diameter) should be selected for re-planting. In general they are not susceptible to pests or diseases, although during the trial those cultivars with variegation on the margins of the leaves or as horizontal banding were found to be susceptible to browning. Some of this was found to be a form of rust.

They are good plants for those gardeners who have problems with deer – the sharp edges of the leaves is thought to deter grazing.

M. sinensis 'Ferner Osten' and M. sinensis 'China'

Ernst Pagels advised that the two cultivars were similar but only *M. sinensis* 'Ferner Osten' had the distinctive white tips to the inflorescence. It was established that the true 'China' was not in the trial and therefore 'Ferner Osten' received the Award of Garden Merit.

M. sinensis 'Strictus' and M. sinensis 'Zebrinus'

These two cultivars with horizontal yellow banding on the leaves, although very similar were distinct in their habit. *M. sinensis* 'Strictus' has a very stiff erect habit and *M. sinensis* 'Zebrinus' has more arching foliage.



M. sinensis 'Strictus'



M. sinensis 'Zebrinus

Award of Garden Merit \(\biggreat{2}{3} \)

M. sinensis var. condensatus		
'Cosmopolitan'	AGM (H3-4)	2001
M. sinensis 'Ferner Osten'	AGM (H4)	2001
M. sinensis 'Flamingo'	AGM (H4)	2001
M. sinensis 'Gewitterwolke'	AGM (H4)	2001
M. sinensis 'Ghana'	AGM (H4)	2001
M. sinensis 'Gold und Silber'	AGM (H4)	2001
M. sinensis 'Grosse Fontäne'	AGM (H4)	2001
M. sinensis 'Kaskade'	AGM (H4)	2001
M. sinensis 'Kleine Fontäne'	AGM (H4)	2001
M. sinensis 'Kleine Silberspinne'	AGM (H4)	2001
M. sinensis 'Morning Light'	AGM (H4)	2001
M. sinensis 'Septemberrot'	AGM (H4)	2001
M. sinensis 'Silberfeder'	AGM (H4)	2001
M. sinensis 'Strictus'	AGM (H4)	2001
M. sinensis 'Undine'	AGM (H4)	2001
M. sinensis 'Zebrinus'	AGM (H4)	2001

Award of Garden Merit subject to naming and availability

Miscanthus sinensis from RHS Garden Wisley. Tall (2m) Stands up, well-furnished, good bold plant. Nice clean foliage colour. Silky flowers, held erect and clear of foliage, move gracefully in the breeze.

Miscanthus sinensis from Royal Botanic Gardens, Kew. Grown from seed, collected and donated by Brian Halliwell. Tall (2m). Nice broad leaf, that turns orange in autumn. Holds tousled flowerheads well. Nice 'afro' effect of crimped plumes. Very floriferous. Good landscape plant.

Award rescinded to the following:

Miscanthus sinensis AGM (H4) 1993 Miscanthus floridulus AGM (H4) 1993

AGM = Award of Garden Merit (H4) = hardy throughout the UK (H3–H4) = not reliably hardy

(H3–H4) = not reliably hardy 2001 = year AGM published

Award of Garden Merit \(\begin{aligned} \text{criteria} \end{aligned} \)

The Award of Garden Merit requires a plant to be:

- excellent for garden decoration
- available
- of good constitution
- not subject to specialist care
- not susceptible to pest or disease
- not subject to reversion.

Background information

Background

Miscanthus has a long tradition of use in Japan in decorative art and gardens as well as being used in a practical way as a thatching material. Its use in UK gardens has only been in the past 100 years - Gertrude Jekyll used M. sinensis 'Gracillimus' for its rounded shape and neat habit in her borders. But it was Karl Foerster, at his nursery in Potsdam, in the 1930s who first realised the potential of Miscanthus for year-long interest in the garden. Fellow German, Ernst Pagels, who worked closely with Foerster and took on many of his ideals, eventually set up his own nursery in the 1950s and concentrated on an intensive programme of breeding. Crossing M. sinensis 'Gracillimus' with other larger Miscanthus, he selected and introduced a large number of cultivars of intermediate size that would flower early in northern Europe. Pagels contributed not only a large number of cultivars to the trial but also advised us on names and the distinctive characteristics of his cultivars.

Botany

Miscanthus is a genus of about 14 species of perennial grasses native to Asia, some Pacific islands and south east Africa. In the wild they are found in grassland, forest edges, streamsides, slopes and coastal areas, often favouring damp habitats. The ornamental species used to be placed in the genus Eulalia and they may be found in older books under this name. Most species are clump-forming in cultivation although M. sacchariflorus is rhizomatous, especially in warm climates. The leaves vary in size depending on species, but normally have a prominent white midvein. The inflorescence consists of a fan-shaped plume made up of long branches attached to a central axis.

M. sinensis

This is the most commonly cultivated species in gardens and has given rise to numerous cultivars differing in height, leaf width, leaf colour and inflorescence colour. It is native to China, Japan, S. Korea and Taiwan. The flowers are usually produced in August or September. The inflorescence branches emerge erect and either retain this habit, adopt a horizontal position or

start to droop almost immediately. Their colour varies from pale silver through to buff to deep purplish-red depending on the cultivar. Their skeletal remains are often retained well into the winter.

M. sacchariflorus and M. × giganteus

These are the two largest cultivated *Miscanthus* (2.5 to 3m) and are grown for their bold foliage. They are also grown as biomass crops. In cool temperate gardens they tend not to flower. Triploid $M. \times giganteus$ is a hybrid between tetraploid M. sacchariflorus and



diploid *M. sinensis. M. sacchariflorus* differs from the hybrid in having elongated rhizomes, but this is only evident on established plants, and its shorter inflorescence axis. It is native to China, Japan, Korea and E. Russia. They are virtually impossible to distinguish when not in flower except by chromosome number.

M. floridulus

Both of the above have been grown in the past under the name *M. floridulus*, a species from E. and S.E. Asia, that is rarely cultivated. True *M. floridulus* in the trial had tall, greyish, rather hairy stems to 2.5m and flopped untidily. It differs from the other species in inflorescence details

M. transmorrisonensis

This species, native to Taiwan, is included by some botanists in *M. sinensis*, but it has one feature that distinguishes it very readily – it is evergreen.

Judging criteria

The trial was assessed by the Floral Trials Subcommittee based on the following criteria:

- impact
- habit
- flowe
- foliage colour (including winter)



Award of Garden Merit descriptions



SHORT CULTIVARS

Miscanthus sinensis 'Kleine Silberspinne'

□ AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers late August. Foliage height 0.7m. Flowering stems 1.2m. Narrow leaves are dark green with a white midrib turning a deep reddish orange and straw colour in autumn. Bright green flowering stems enhance effect. Erect inflorescences, rosecoloured turning brown and fluffy when mature. Particularly good for winter impact and foliage effect. Neat, distinct. Nice for small garden. (name in English: small silver spider)



Miscanthus sinensis 'Flamingo'

Y AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers mid August. Foliage height 1m. Flowering stems 1.6m. Well balanced erect habit with graceful, arching, elegant foliage with white midrib, turning orange gold in autumn. Very floriferous. Rose-coloured, drooping flowerheads that become silvery as they mature. Described by E Pagels as "rose-coloured flower, light and easily hanging type is of special elegance, on top of this she looks beautiful in her autumnal tints".



MEDIUM CULTIVARS

Miscanthus sinensis Ferner Osten'

□ AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers early August. Foliage height 0.9m. Flowering stems 1.6m. Nice colour and form. Leaves with cream midrib, turning orange in autumn. Flowers are held at a uniform height, clear of the foliage. Flowerheads, arching, are a lovely rich red with white tips, one of the best for intensity of colour and catches the light well, fading to beige as they mature. (name in English: far east)



Miscanthus sinensis 'Gewitterwolke'

Y AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers early August. Foliage height 1.25m. Flowering stems 1.8m. Broad leaves, foliage turns orange in autumn. Striking. Very floriferous with good solid, silver and dark purple flower heads which are all out at same time. Arching plumes can be rather congested, with many held in the foliage. Tall, erect, narrow habit; "looks as though it's been tied up". (name in English: thundercloud)



Miscanthus sinensis 'Ghana'

[™] AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers early September. Foliage height 1m. Flowering stems 1.8m. Lovely arching leaves. Brown-red flowers are held upright and well above the thin-leaved, bright green foliage, which turns copper red in autumn.

Award of Garden Merit descriptions



Miscanthus sinensis 'Gold und Silber'

Y AGM (H4) 2001

Sent by Feldweber Nursery, Austria.

Flowers mid September.
Foliage height 0.9m.
Flowering stems 1.4m.
Foliage turns orange-gold in autumn. Golden anthers on brown-red flower heads show like gold raindrops, compact and dainty. Good size for smaller garden.



Miscanthus sinensis 'Undine'

Raised by Ernst Pagels and sent by E Pagels and RBG Kew

Flowers late August. Foliage height 1m. Flowering stems 2m. Leaves with white midrib turn orange and straw-coloured in autumn. The arching red inflorescences turn rose and buff when mature. Tall, airy, fine and graceful. Particularly good for winter foliage.



Miscanthus sinensis 'Kaskade'

Raised and sent by Ernst Pagels

Flowers mid August. Foliage height 1.25m. Flowering stems 1.9m. Narrow foliage, with white midrib, turns rich copper red in autumn and then displays a nice pewter effect. Attractive, cascading, rose-coloured, silky flowers are elegant and held well above the leaves, turning silver-buff when mature.



TALL CULTIVARS

Miscanthus sinensis 'Grosse Fontane'

Y AGM (H4) 2001

Raised by Ernst Pagels, sent by Ernst Pagels and RBG Kew

Flowers early September.
Foliage height 1.7m.
Flowering stems 2.5m. Very long, arching, green leaves.
Distinct red flower heads held high above the foliage, turning more straw-coloured with age. Thin, airy habit.
Distinct. (name in English: large fountain)



Miscanthus sinensis 'Kleine Fontäne'

Y AGM (H4) 2001

Raised and sent by Ernst Pagels

Flowers early August.
Foliage height 0.9m.
Flowering stems 1.6m.
Narrow foliage with white midrib. Stems and leaves turn a golden straw colour in autumn. Gracefully drooping inflorescence that opens red and quickly turns very pale. Spectacular fluffy showy seed heads.
Attractive texture. Useful height. (name in English: small fountain)



Miscanthus sinensis 'Septemberrot'

Y AGM (H4) 2001

Raised by Ernst Pagels. Sent by RHS Wisley

Flowers early September.
Foliage height 1.4m.
Flowering stems 2.4m. Leaves with large white midrib turn a rich red orange colour in November. Good spacing between erect, silvery, red flower heads, which are held well above the foliage.
Graceful, elegant, airy.
Excellent colour, the best for late season effect. (name in English: September red)



Miscanthus sinensis 'Silberfeder'

Ÿ AGM (H4) 2001

Sent by Hoecroft Plants

Flowers late August. Foliage height 1.5m. Flowering stems 2.4m. Leaves with white midrib. Tall, airy plumes emerge a beautiful shining silver green. Elegant. Lax habit. (name in English: silver feather)

Selected by Hans Simon from seedlings growing at the Munich Botanic Garden in the 1950s.



Miscanthus sinensis 'Strictus'

Y AGM (H4) 2001

Sent by Apple Court Nursery, Beth Chatto, RBGKew

An old cultivar from Japan, often used there as a bonsai

companion plant, was first

introduced to the West by

obtained it from Masato

Yokoi. Named by Kurt

the US National Arboretum, Washington, D.C., who

Bluemel, a US nurseryman.

Flowers late October to early November. Foliage height 1.5m. Flowering stems 2m. Similar to 'Zebrinus' in leaf markings, but more upright in habit. Forms tight stiffly upright clumps. Cream transverse bands appear on leaves earlier than other varieties, with leaves turning a pale brown colour in autumn. Particularly good for winter impact. Buff, heavily flushed with pink, silvery flowers are crinkly when open. Common name porcupine grass

One of the first *Miscanthus* in cultivation in Western gardens.



VARIEGATED CULTIVARS

Miscanthus sinensis var. condensatus 'Cosmopolitan'

Ŷ AGM (H3−4) 2001

Sent by Apple Court Nursery

Flowers October/November. Foliage height 2m. Flowering stem 2.2m. More or less evergreen, leaves very broad, foliage longitudinally variegated with white to cream stripes and edges. Very striking variegation. Most handsome of the variegated cultivars. Erect, silver flower plumes.

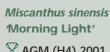
Originally found in Japan in the 1940s by Toyoichi Aoki of Tokyo. Introduced to the West by US National Arboretum, Washington, D.C. in the 1970s and named by Kurt Bluemel, a US nurseryman.



Miscanthus sinensis 'Zebrinus'

Y AGM (H4) 2001
Sent by RHS Wisley

Flowers first half October.
Foliage height 1.5m.
Flowering stems 2.2m. Long arching leaf blades with large transverse cream blotches. Erect buff-silver flower plumes. Common name zebra grass. Syn.
Eulalia japonica



≅ AGM (H4) 2001

Sent by RHS Wisley

Foliage height 1.6m. Did not flower in trial. Very elegant with light arching sprays of leaves with thick white central stripe and narrow cream margins. Narrow, arching habit wider at top than at bottom.



Miscanthus selection guide

	Foliage	Flower	Flowers	Size	Comments	Judges
	height	height				verdict
M. × giganteus 'Gilt Edge'	2.1m			Tall	Very broad leaf striped and edged yellow. Non- running. Originated as a sport in Roger Grounds' Hampshire garden.	
M. × giganteus 'Gotemba'	2.4m			Tall	Strong yellow longitudinal variegation. Raised by Wada in Japan. Very colourful mauve flush to stems, handsome plant. Runs. Suffered from rust in trial. Very attractive variegated leaf, but a shame it spreads.	Very good
M. 'Herbstfeuer'	0.8m			Dwarf	Similar to <i>M. 'Purpurascens'</i> . In October lovely reddish tinge to foliage with attractive corkscrew-like curl to drying tips. Origin unknown. (in English: autumn fire)	
M. sinensis 'Adagio'	0.5m	0.8m	late Aug	Dwarf	Narrow leaf. Sparse flowering. Stands well. Good for the smaller gardens, or containers. Introduced by Kurt Bluemel, US nurseryman.	Very good
M. sinensis 'Afrika'					Small with very good autumn colour. Raised by Ernst Pagels. Died in the trial.	
M. sinensis 'Altweiber Sommer'	1.7m	2.6m	early Sept	Tall	Broad, arching leaves that turn yellow and orange in November. Flowers elegant, not heavy, held very high. Raised by Ernst Pagels.	
M. sinensis 'Arabesque'	1.5m	2.2m	early Sept	Medium	Flowerheads held well above foliage, a bit thin, not quite the character of some. Introduced by Kurt Bluemel, a US nurseryman.	
M. sinensis 'China'					Entry in trial proved to be 'Ferner Osten'. 'China' flowers mid season and does not have white tips to inflorescence. Raised by Ernst Pagels.	
M. sinensis var. condensatus	2.1m		No flower	Tall	Broad leaf with silver bloom on lower stems ("nice ankles"). Good background foil. Handsome and tidy. Not reliably hardy. Good for late season green.	Very good
M. sinensis var. condensatus 'Cabaret'	2m			Tall	Has central leaf variegation, other cultivars have marginal variegation. Bright, green edge, cream variegation. Very broad leaf. Lot of browning of cream areas occurred during the trial. Very old Japanese cultivar. Introduced to the West by US National Arboretum in the 1970s, named by Kurt Bluemel, a US nurseryman.	Very good
M. sinensis var. condensatus 'Cosmopolitan'	2m	2.2m	Nov	Tall	Very broad leaf. Most handsome of the variegated cultivars. Long cultivated in Japan. Introduced to the West by US National Arboretum in the 1970s, named by Kurt Bluemel, a US nurseryman.	Excellent
M. sinensis var. condensatus 'Cosmo Revert'	1.8m		no flower	Tall	Green reversion of 'Cosmopolitan' hence the name 'Cosmo Revert'. Sometimes listed under the later name of 'Emerald Giant'. Introduced by Greg Speichert, US nurseryman.	
M. sinensis 'Cornet'	1.2m	2.4m	early Sept	Medium	Good large green leaf, becoming a glowing orange gold in November. Tendency to flop.	Good
M. sinensis . 'Dixieland'	1.4m		late Nov	Medium	Similar to 'Variegatus' and 'Rigoletto'. A good bold plant with distinctive striped silver green foliage, tendency to flop. Introduced by Kurt Bluemel.	Very good
M. sinensis 'Ferner Osten'	1m	1.6m	early Aug	Medium	Flowerheads arching, good rich red colour with white tips held clear of foliage. Leaves broader than <i>M. sinensis</i> 'China'. Foliage turns a rich orange in November. Raised by Ernst Pagels. (in English: far east)	Excellent
M. sinensis 'Flamingo' ∑	1m	1.6m	mid Aug	Medium	In autumn foliage turns orange. Very silvery, soft drooping flowerheads. Raised by Ernst Pagels.	Excellent
M. sinensis 'Gaa'	1.5m	2.1m	mid Sept	Medium	Excellent red blooms. Tendency to flop. Raised by Ernst Pagels	Good

	Foliage height	Flower height	Flowers	Size	Comments	Judges verdict
M. sinensis 'Gearmella'	0.7m	1.1m	mid Sept	Short	Arching flowers held well clear of the foliage. Raised by Ernst Pagels.	
M. sinensis 'Gewitterwolke'	1.25m	1.8m	early Aug	Medium	Narrow upright habit with large flowerheads. Raised by Ernst Pagels. (in English: thundercloud)	Excellent
M. sinensis 'Ghana' ∑	1m.	1.8m	early Sept	Medium	Foliage very good autumn colour. Raised by Ernst Pagels.	Excellent
<i>M. sinensis</i> 'Gold und Silber' ∑	0.9m	1.4m	early Sept	Medium	Broad leaves that turn orange gold in November. Very floriferous with dark red flowerheads. Compact, dainty. Good size for small gardens.	Excellent
M. sinensis 'Goldfeder'	0.9m	1.8m	mid Sept	Tall	Very silver blonde plumes held well above yellow longitudinal variegated foliage. Distinct. Open habit. Sport of 'Silberfeder' found in 1950s by Hans Simon, a German nurseryman. (in English: gold feather)	Good
M. sinensis 'Goliath'	1.4m	2.5m	early Sept	Tall	Broad leaves with prominent white stripe. Deep red flowers held well above foliage. Vigorous. Raised by Ernst Pagels. Big, handsome cultivar.	Good
M. sinensis 'Gracillimus'	1.5m		late Nov	Medium	'Gracillimus' (syns <i>M. sinensis</i> var. <i>gracillimus</i> , <i>Pollinia gracillima</i> , common name maiden grass) usually has a rounded habit and always very narrow leaves. It is sometimes raised from seed, which can result in inferior, wider-leaved plants	Good
M. sinensis 'Graziella'	0.8m	1.5m	early Sept	Medium	Narrow leaves turn orange in late autumn. Raised by Ernst Pagels.	Good
M. sinensis 'Grosse Fontäne' ❤️	1.7m	2.5m	early Sept	Tall	Very long, arching leaves which give wonderful autumn colour (orange, purple, reds and green). Plenty of flower, yet thin and airy. Quite distinct. Raised by Ernst Pagels. (in English: large fountain)	Excellent
M. sinensis 'Hermann Müssel'	1.1 m	1.7m	late Aug	Medium	Nice balance of leaf and flower. Flowers, erect, held well above dense foliage. Very floriferous. Very neat upright habit, good for smaller garden. Raised by Ernst Pagels.	Very good
M. sinensis 'Hinjo' (syn. 'Little Nicky')	1m			Dwarf	Very dwarf. Silvery stems, horizontal banding of yellow. Horizontal bands browned badly in trial. Possibly would not scorch in North.	Good
M. sinensis 'Juli'	0.85m	2m	July/ Aug	Medium	Leaves very broad. Nice balance and habit. Raised by Ernst Pagels. (in English: July)	
M. sinensis 'Kaskade' ∑	1.25m	1.9m	mid Aug	Medium	Narrow foliage with white midrib turns rich red copper in autumn. Attractive, cascading, rose-coloured, silky flowers, held well above the foliage, turning silvery buff when mature. Raised by Ernst Pagels. (in English: Cascade)	Excellent
M. sinensis 'Kirk Alexander'	1.4m		late Nov	Medium	Supposed to be a dwarf 'Zebrinus'. In trial, bright green foliage turned yellow at tips (with a few cream bands). Found in Ashville N. Carolina, USA.	
M. sinensis 'Kleine Fontäne' ♥	0.9m	1.6m	early Aug	Medium	Narrow leaves. The flowerheads open red and turn very pale and fluffy. Very floriferous. Useful height. Raised by Ernst Pagels. (in English: small fountain)	Excellent
<i>M. sinensis</i> 'Kleine Silberspinne'	0.7m	1.2m	late Aug	Dwarf	Very narrow dark green leaves that turn a deep reddish orange. Erect inflorescences, rose-coloured, turning brown and fluffy when mature. Very floriferous. Rounded habit. Neat, distinct. Nice for small garden. Raised by Ernst Pagels. (in English: small silver spider)	Excellent
M. sinensis 'Little Kitten'	0.5m	0.8m	mid Aug	Dwarf	Very narrow foliage. Very erect, buff flowerheads. Very compact habit, good for modern garden.	Very good

Miscanthus selection guide

	Foliage height	Flower height	Flowers	Size	Comments	Judges verdict
M. sinensis 'Malepartus'	1.1m	2m	late Aug	Tall	Autumn foliage orange and straw colour. Large erect red plumes held well above mid sized foliage. Raised by Ernst Pagels.	Very good
M. sinensis 'Morning Light'	1.5m		no flower	Medium	Leaves very narrow with clean white margins. Arching sprays of foliage. Very elegant and light. When young wider at top than bottom. Is a variegated form of 'Gracillimus'. Good for smaller garden or container.	Excellent
M. sinensis 'Nippon'	0.8m	1.5m	late Aug	Small	Narrow upright habit. Upright inflorescences. Autumn foliage colour orange red. Raised by Ernst Pagels.	
M. sinensis 'Nishidake'	1.5m	2.6m	early Aug	Tall	Leaves broad, turn buttery yellow in early winter. Pretty, fine plumes held well above foliage, but quite thin. Flower stems a good colour. Name means 'the one who goes to the west'. Given to Ernst Pagels by Paul Petersen from Overdam.	
M. sinensis 'November Sunset'	1.6m	1.6m	mid Oct	Medium	Narrow leaves which remain green into November. Flowers stay in foliage. Raised by Kurt Bluemel.	
M. sinensis 'Poseidon'	1.2m	2.3m	late Aug	Tall	Broad leaves. Tendency to flop. Raised by Ernst Pagels.	
M. sinensis 'Positano'	1.5m	2.3m	early Sept	Tall	Flowers well above foliage, large, good criss-crossing foliage. In autumn very good coloured stems, reds & oranges. Handsome – flopped somewhat in trial. Raised by Ernst Pagels.	Very good
M. sinensis 'Professor Richard Hansen'	1.1m.	2.6m	late Aug	Tall	Very striking, good bold white stripes on dark green foliage. In November foliage has good caramel colour. Erect flowering spikes of silvered soft pink held well clear of foliage. Very erect, elegant and clean. Raised by Ernst Pagels.	Very good
M. sinensis 'Pünktchen'	1.5m	2.2m	early Oct	Tall	Similar leaf marking to 'Strictus' and 'Zebrinus' and grew as tall in trial, although supposed to be shorter. However was very free flowering with red plumes. Raised by Ernst Pagels. (in English: little dot).	
M. sinensis 'Rigoletto'	1.4m		Nov	Tall	Good variegated foliage, some reversion. Similar to 'Variegatus' and 'Dixieland'. Reddish margin to base of leaves Tendency to flop late in season. Introduced by Kurt Bluemel.	Very good
M. sinensis 'Roland'	1.4m	2.6m	mid Aug	Tall	Good bold leaves. Crinkly, very pale flowerheads. Big, bold, tousled look, interesting, taller than most modern hybrids – Very floriferous. Raised by Ernst Pagels.	Good
M. sinensis 'Rotsilber'	1.2m	2m	early Sept	Tall	Flowerheads erect, red turning silver. Foliage turning rich reddish coppery colour in autumn. Tendency to flop. Raised by Ernst Pagels. (in English: red silver)	Very good
M. sinensis 'Sarabande'	1.5m	2m	mid Sept	Tall	Very narrow leaves with nice white stripe. Erect inflorescences. Very erect habit. Similar to 'Gracillimus' but freer flowering. Introduced by Kurt Bluemel.	Very good
M. sinensis 'Septemberrot'	1.4m	2.4m	early Sept	Tall	Foliage with good bright stripe turns orange then coppery colour in autumn. Erect flowers held well above foliage. Graceful. (in English September red)	Very good
M. sinensis 'Silberfeder'	1.5m	2.4m	late Aug	Tall	Leaves broad. Tall, airy plumes emerge a beautiful shining silver green. Free-flowering. Elegant. Lax habit. Selected by Hans Simon at the Munich Botanic Garden in the 1950s. (in English: silver feather)	Excellent
M. sinensis 'Sioux'	0.7m	1.1m	mid Sept	Dwarf	Foliage turns a good rich orange in autumn. Flowers sparse but a good red.	
M. sinensis 'Slavopour'	1.2m	1.7m	late Aug	Medium	Possibly evergreen. Not particularly distinguished.	
M. sinensis 'Spätgrün'	1.2m	1.6m	late Aug	Medium	Valuable that foliage stays green late into December.	Good

	Foliage height	Flower height	Flowers	Size	Comments	Judges verdict
M. sinensis 'Strictus' ♥	1.5m	2m	late Oct	Tall	Leaves with horizontal banding held very stiffly erect. Flowers erect, crinkly plumes.	Excellent
M. sinensis 'Tiger Cub'	1.3m	1.6m	late Oct	Medium	Shorter than 'Strictus'. Horizontal banding of yellow variegation in foliage turned brown. Flowers sparse.	
M. sinensis 'Undine' ∑	1m	2m	late Aug	Medium	Leaves turn orange and straw coloured in autumn. Particularly good for winter foliage impact. Arching red inflorescences turn rose/buff when mature.	Excellent
M. sinensis 'Variegatus'	1.6m		Nov	Tall	Makes a wonderful fountain of strongly variegated green/white foliage. Crinkly heads emerge in November. Considered one of the hardier of the variegated cultivars. Several different clones of 'Variegatus' were entered into the trial and, uncertainty over which was the original clone prevented an AGM.	Excellent
M. sinensis 'Vorläufer'	0.6m	1.4m	early Aug	Dwarf	Earliest of the dwarf cultivars to flower. Leaves bright green, which turn yellow in autumn. Very fine and delicate, red flowers. Raised by Ernst Pagels. (in English: forerunner)	Good
M. sinensis 'Zebrinus'	1.5m	2.2m	early Oct	Tall	Long arching leaf blades with large transverse cream blotches. Erect buff-silver flower plumes.	Excellent
M. sinensis 'Zwergelefant'	1.1m	1.7m	late Aug	Medium	Bold foliage. Distinct large rose coloured crinkled plumes that unfurl within the leaf, like an elephant's trunk thrown back over its head, hence the name. Good for flower arranging (like a mop). Raised by Hans Simon of Munich Botanic Garden, introduced Kurt Bluemel. (in English: dwarf elephant)	Good
M. transmorrisonensis	1.2m	2.2m	late Aug		Evergreen. Holds flower well above foliage. If not cut down but just dead-headed plants will flower earlier.	Good

The Floral Trials Committee

Made up of people who have spent a lifetime observing and growing plants both for pleasure and as a profession. It is this experience and their sharp eyes and deep knowledge that gives such unparalleled value to their recommendations

Chairman: John Ravenscroft Dr Tony Lord Graham Rice Jean Sambrook Vice Chairmen: **Keith Sangster** Rov Cheek **Terry Smale** Pam Schwerdt Mike Smallwood Bill Boardman Liz Strangman Wendy Bowie Brian Talman John Coke Ray Waite Nigel Colborn Victoria Wakefield Stuart Williams Ivan Dickings Fergus Garrett Diana Hart-Dyke Co-opted members: Tony Hender Rogers Grounds Sibylle Kreutzberger Mary Thorp Christopher Lloyd Alison Mulvaney

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Four Seasons, Forncett St Mary, Norwich, Norfolk, NR16 1JT

Feldweber Stauden Blumenbinderei, A-4974 ORT im Innkreis 139, Austria

Hoecroft Plants, Severals Grange, Holt Rd, Wood Norton, Dereham, NR20 5BL

Ernst Pagels Staudenkulturen, Deichstrasse 4, D-26789 Leer, Germany

The Royal Botanic Gardens Kew, Richmond, Surrey TW9 3AB

 $\begin{tabular}{ll} \textbf{The Royal Horticultural Society}, RHS\\ Garden, Wisley, Woking, GU23~6QB \end{tabular}$

Green Farm Plants (no longer trading)

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Further reading

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The Royal Horticultural Society

The RHS is the UK's leading gardening charity dedicated to advancing horticulture and promoting good gardening. Its charitable work includes providing expert advice and information, advancing horticulture, training the next generation of gardeners, helping school children learn about plants, and conducting research into plants, pests and environmental issues affecting gardeners. The RHS Award of Garden Merit plant trial scheme is an important part of this work.

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RHS plant trials serve the professional gardener who wants to know the range of plants available, including the latest breeding and selection programmes, with their distinctive characteristics and provenance. They also serve the amateur who wants to know which plants will grow and perform well in a particular garden situation.

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The Herbarium of the RHS is at Wisley where, like the Library, it is used continually as a reference tool by botanists and other interested parties. This herbarium is one of a small number in the world dedicated to horticultural plants. At present the collection contains about 80,000 herbarium specimens, 30,000 photographic images and 4,000 paintings of plants. Material is actively collected from a wide spectrum of sources, including RHS trials.

RHS Bulletins

Canna: September 2003

Daisies, Yellow, Perennial: September 2004

Delphinium: June 2004 Lavender (hardy): July 2003 Potentilla (shrubby): July 2002 Salad Potatoes: November 2004

Spiraea japonica (with coloured leaves):

November 2003

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