

No.



201400079

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

HZPC HOLLAND B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

An application requesting a certificate of protection for an alleged distinct variety of sexually reproduced, or tuber propagated plant, the name and description of which are contained in the application and exhibits, a copy of which is hereunto annexed and made a part hereof, and the various requirements of law in such cases made and provided have been complied with, and the title thereto is, from the records of the PLANT VARIETY PROTECTION OFFICE, in the applicant(s) indicated in the said copy, and whereas, upon due examination made, the said applicant(s) is (are) adjudged to be entitled to a certificate of plant variety protection under the law.

Now, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of TWENTY years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by law, the right to exclude others from selling the variety, or offering it for sale, or reproducing it, or importing it, or exporting it, or conditioning it for propagation, or stocking it for any of the above purposes, or using it in producing a hybrid or different variety there from, to the extent provided by the PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)



Attest:

POTATO

'COLOMBA'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-sixth day of February, in the year two thousand and sixteen.*

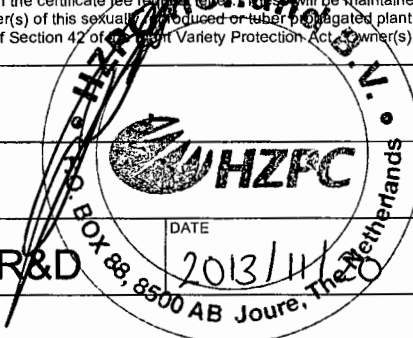
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions

Form Approved - OMB No. 0581-0035

<p>U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE</p> <p>APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE <i>(Instructions and information collection burden statement on reverse)</i></p>		<p>The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.</p> <p>Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).</p>	
<p>1. NAME OF OWNER HZPC Holland B.V.</p>		<p>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME HZD 00- 277</p>	<p>3. VARIETY NAME COLOMBA</p>
<p>4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) P.O. Box 88 NL-8500 AB Joure</p>		<p>5. TELEPHONE (include area code) +31-513-489888</p>	<p>FOR OFFICIAL USE ONLY PVPO NUMBER 201400079</p>
<p>6. FAX (include area code) +31-513-489800</p>		<p>7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Limited Company</p>	<p>8. IF INCORPORATED, GIVE STATE OF INCORPORATION</p>
<p>9. DATE OF INCORPORATION 12/20/2013</p>		<p>10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) HZPC Americas Corp. 19, Regis Duffy Drive West Royalty C1E OK5 Charlottetown P.E.I.</p>	<p>11. TELEPHONE (include area code) +19028922004</p>
<p>12. FAX (include area code) +19028920321</p>		<p>F E E S R E C D FILING AND EXAMINATION FEES: \$ 4,382 DATE 12/20/2013 CERTIFICATION FEE: \$ DATE</p>	<p>13. E-MAIL hzpc@hzpc.ca</p>
<p>14. CROP KIND (Common Name) Potato</p>		<p>15. GENUS AND SPECIES NAME OF CROP Solanaceae</p>	<p>16. FAMILY NAME (Botanical) Solanum tuberosum L.</p>
<p>17. IS THE VARIETY A FIRST GENERATION HYBRID? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>		<p>18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF YES, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.</p>	<p>20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23) <input type="checkbox"/> UNDECIDED</p>
<p>19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)</p> <p>a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety</p> <p>b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness</p> <p>c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety</p> <p>d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional)</p> <p>e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership</p> <p>f. <input type="checkbox"/> Filing and Examination Fee (\$4,382), make checks payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) other methods of payment explained in the instructions</p>		<p>21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED</p> <p>22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. ___ FOUNDATION ___ REGISTERED ___ CERTIFIED</p> <p>(If additional explanation is necessary, please use the space indicated on the reverse.)</p>	
<p>23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)</p>		<p>24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)</p>	
<p>25. The owners declare that a viable sample of basic seed will be furnished directly to an acceptable depository in support of the variety within three months of filing. Seed will be replenished upon request in accordance with such regulations as may be applicable. For a tuber propagated variety or vegetative propagated parent of the variety, a tissue culture or vegetative sample will be deposited in a public repository within three months of the date of the certificate fee receipt. These samples will be maintained for the duration of the certificate. The undersigned owner(s) is (are) the owner(s) of this sexually produced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.</p>			
<p>SIGNATURE OF OWNER R.P.Graveland</p>		<p>SIGNATURE OF OWNER</p>	
<p>NAME (Please print or type) R.P.Graveland</p>		<p>NAME (Please print or type)</p>	
<p>CAPACITY OR TITLE Manager HZPC R&D</p>		<p>CAPACITY OR TITLE</p>	
<p>DATE 2013/11/11</p>		<p>DATE</p>	



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Continuation Page from ST – 470 (Application for Plant Variety Protection Certificate)

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

Date of first sale: 2010/09/30 in Spain

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

The Netherlands, ARD 1909, granted 2011/05/18, - EU, 30810, granted 2011/10/10

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE		FOR OFFICIAL USE ONLY PVPO NUMBER
EXHIBIT A – ORIGIN AND BREEDING HISTORY ** Use additional pages as needed.		
1. Name of Owner HZPC Holland B.V.	2. Temporary Designation or Experimental Name HZD 00- 277	3. Variety Name COLOMBA
4. Describe the genealogy (back to and including public and commercial varieties, lines, or clones used) and the breeding method(s). ** COLOMBA originates from the conventional cross: CARRERA (♀) x AGATA (♂). See also attached genealogy sheet. The cross was made in 1999 at HZPC R&D in Metslawier, The Netherlands. The variety is selected from the F1 of the cross first in 2000.		
5. Give the details of subsequent stages of selection and multiplication. **		
Year	Detail of Stage	Selection Criteria
1999	Cross: CARRERA x AGATA was made	N.A.
2000	True seed sown in glasshouse and clone (1 tuber) harvested	N.A.
2001-2002	1st and 2nd year field clone	Agronomic characters
2002-2008	Field tests in many countries	Resistances, quality, agronomic
2008-2009	Application for protection NLD and EU	N.A.
2008-onwards	Introduction of variety in potential markets	N.A.
2010	Furst commercialisation	N.A.
6. Is the variety uniform? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No How did you test for uniformity? Variety has been multiplied and observed according to UPOV regulations for more than 10 years and has been found to be uniform. Variety has finally proven to be uniform in DUS trials of the "Raad van Plantenrassen" in The Netherlands.		
7. Is the variety stable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No How did you test for stability? Over how many generations? Variety has been multiplied and observed according to UPOV regulations for more than 10 years and it has been found to be stable. Variety has finally proven to be stable in DUS trials of the "Raad van Plantenrassen" in The Netherlands.		
8. Are genetic variants observed or expected during reproduction and multiplication? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, state how these variants may be identified, their type and frequency.		

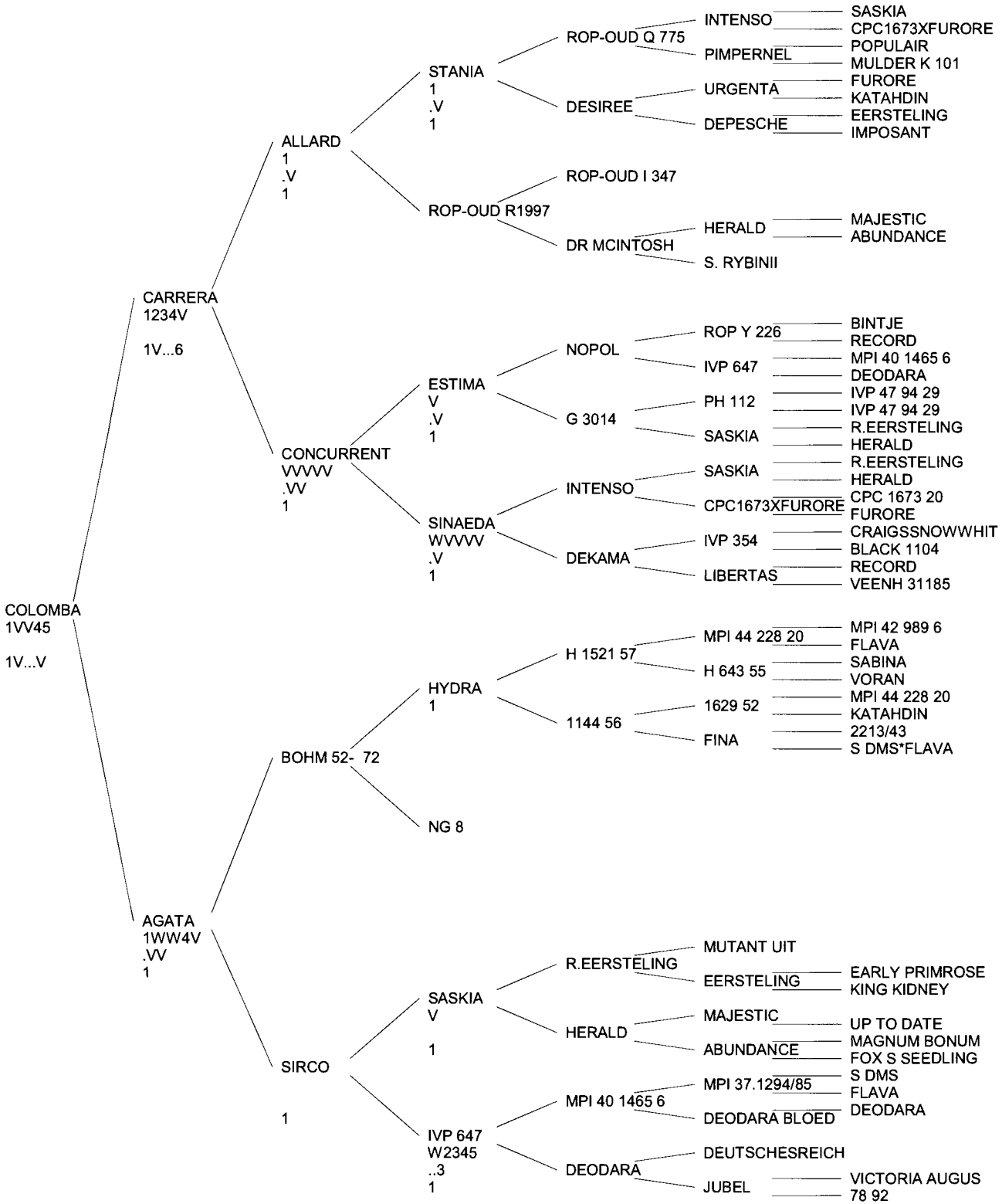


Exhibit B Form

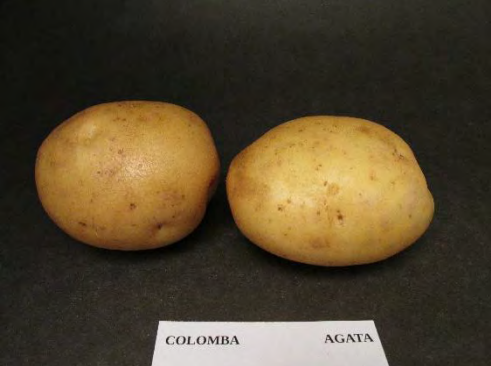
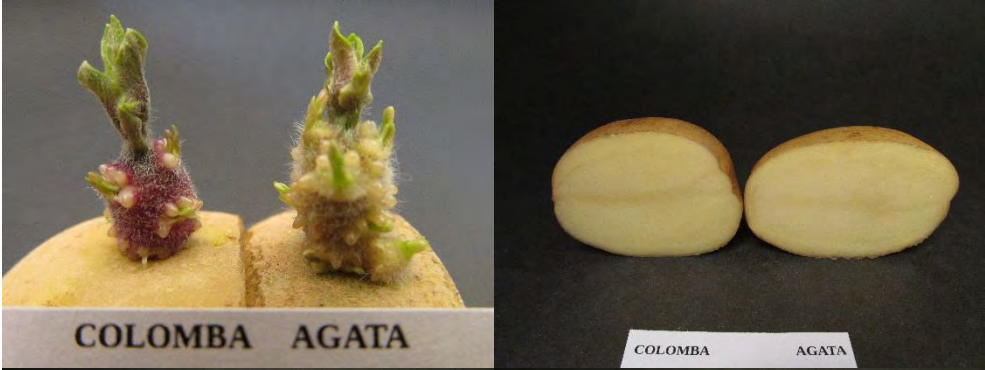
Based on overall morphology, COLOMBA is most similar to AGATA
Applicant's new variety *Most similar comparison variety(ies)*

COLOMBA most clearly differs from AGATA in the following traits:
Applicant's new variety *Most similar comparison variety(ies)*

Name the specific trait, then list the value of that trait for each variety in the comparison. Attach appropriate supporting evidence (see the Guidelines for Presenting Evidence in Support of Variety Distinctness, available from the PVP Office or website).

<i>Eg. Leaf Pubescence</i> <i>Eg. Leaf Color</i> <i>Eg. Plant Height</i>	<i>heavy pubescence</i> <i>Dark Green (5GY 3/4)</i> <i>200 cm +/- 10 cm (N=25)</i>	<i>glabrous</i> <i>Light Green (2.5GY 8/10)</i> <i>250 cm +/- 15 cm (N=25)</i>	<i>photograph attached</i> <i>Munsell Color Chart</i> <i>statistics attached</i>
1. Qualitative traits: Lightsprout shape	Applicant's New Variety COLOMBA Conical	1 st Comparison Variety AGATA Broad cylindrical	Location of Evidence Photograph
2. Color traits: Flesh Color	Yellow	Light yellow	Location of Evidence Photograph
3. Quantitative traits:			Location of Evidence
4. Other:			Location of Evidence

Use additional tables to present clear differences for additional comparison varieties. Use additional pages to present supporting evidence.



NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)		FOR OFFICIAL USE ONLY
		PVPO NUMBER

REFERENCE VARIETIES: Enter the reference variety name in the appropriate box.

Application Variety (V)	Reference Variety 1 (R1)	Reference Variety 2 (R2)	Reference Variety 3 (R3)	Reference Variety 4 (R4)

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PLEASE READ ALL INSTRUCTIONS CAREFULLY:

1. MARKET CHARACTERISTICS:

***MARKET CLASS:**

1 = Yellow-flesh Tablestock 2 = Round-white Tablestock 3 = Chip-processing 4 = Frozen-processing
 5 = Russet Tablestock 6 = Other _____

V	R1	R2	R3	R4
---	----	----	----	----

2. LIGHT SPROUT CHARACTERISTICS: (See Figure 1)

***LIGHT SPROUT: GENERAL SHAPE**

1 = Spherical 2 = Ovoid 3 = Conica 4 = Broad cylindrica 5 = Narrow cylindrical 6 = Other _____

V	R1	R2	R3	R4
---	----	----	----	----

***LIGHT SPROUT BASE: PUBESCENCE OF BASE**

1 = Absent 2 = Weak 3 = Medium 4 = Strong 5 = Very Strong

V	R1	R2	R3	R4
---	----	----	----	----

***LIGHT SPROUT BASE: ANTHOCYANIN COLORATION**

1 = Green 2 = Red-violet 3 = Blue-violet 4 = Other(describe) _____

V	R1	R2	R3	R4
---	----	----	----	----

***LIGHT SPROUT BASE: INTENSITY OF ANTHOCYANIN COLORATION (IF PRESENT)**

1 = Absent 2 = Weak 3 = Medium 4 = Strong 5 = Very Strong

V	R1	R2	R3	R4
---	----	----	----	----

*** LIGHT SPROUT TIP: HABIT**

1 = Closed 2 = Intermediate 3 = Open

V	R1	R2	R3	R4
---	----	----	----	----

2. LIGHT SPROUT CHARACTERISTICS: (continued)

LIGHT SPROUT TIP: PUBESCENCE

1 = Absent 2 = Weak 3 = Medium 4 = Strong 5 = Very Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LIGHT SPROUT TIP ANTHOCYANIN COLORATION

1 = Green 2 = Red-violet 3 = Blue-violet 4 = Other(describe) _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LIGHT SPROUT TIP: INTENSITY OF ANTHOCYANIN COLORATION (IF PRESENT)

1 = Absent 2 = Weak 3 = Medium 4 = Strong 5 = Very Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LIGHT SPROUT ROOT INITIALS: FREQUENCY

1 = Absent 2 = Some 3 = Abundant

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

3. PLANT CHARACTERISTICS:

GROWTH HABIT: (See Figure 2)

3 = Erect (>45° with ground) 5 = Semi-erect (30-45° with ground) 7 = Spreading

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TYPE:

1 = Stem (Øilage open, stems clearly visible) 2 = Intermediate 3 = Leaf (Foliage closed, stems hardly visible)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

MATURITY: Days after planting (DAP) at vine senescence

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PLANTING DATE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

***REGIONAL AREA:**

1 = Pacific North West (WA, OR, ID, CO, CA) 2 = North Central (ND, WI, MI, MN, OH) 3 = North East (ME, NY, PA, NJ, MD, MA, RI,)
 4 = Mid-Atlantic Erect (VI, NC, SC, South NJ, FL) 5 = South (LA, TX, AZ, NE) 6 = Canada
 7 = Europe 8 = England 9 = Latin America 10 = Brazil 11 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

MATURITY CLASS:

1 = Very Early (<100 DAP) 2 = Early (100-110 DAP) 3 = Mid-season (111-120 DAP) 4 = Late (121-130 DAP) 5 = Very Late (>130 DAP).

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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4. STEM CHARACTERISTICS: Measure at early first bloom*** STEM ANTHOCYANIN COLORATION:**

1 = Absent 3 = Weak 5 = Medium 7 = Strong 9 = Very Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

STEM WINGS: (See Figure 3)

1 = Absent 3 = Weak 5 = Medium 7 = Strong 9 = Very Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

5. LEAF CHARACTERISTICS:**LEAF COLOR:** (Observe fully developed leaves located on middle 1/3 of plant)

1 = Yellowing-green 2 = Olive-green 3 = Medium Green 4 = Dark Green 5 = Grey-green 6 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LEAF COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart

(Observe fully developed leaves located on middle 1/3 of plant and circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LEAF PUBESCENCE DENSITY:

1 = Absent 2 = Sparse 3 = Medium 4 = Thick 5 = Heavy

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LEAF PUBESCENCE LENGTH:

1 = None 2 = Short 3 = Medium 4 = Long 5 = Very Long

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

(Note Descriptor #15 can be used to describe the type and length of the glandular trichomes observed.)

*** LEAF SILHOUETTE:** (See Figure 4)

1 = Closed 3 = Medium 5 = Open

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PETIOLES ANTHOCYANIN COLORATION:

1 = Absent 3 = Weak 5 = Medium 7 = Strong 9 = Very Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

LEAF STIPULES SIZE: (See Figure 5)

1 = Absent 3 = Small 5 = Medium 7 = Large

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TERMINAL LEAFLET SHAPE (See Figures 6 and 7)

1 = Narrowly ovate 2 = Medium Ovate 3 = Broadly Ovate 4 = Lanceolate 5 = Elliptical 6 = Obovate 7 = Oblong 8 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

5. LEAF CHARACTERISTICS: (continued)

TERMINAL LEAFLET TIP SHAPE: (See Figures 6 and 8)

1 = Acute 2 = Cuspidate 3 = Acuminate 4 = Obtuse 5 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

* **TERMINAL LEAFLET BASE SHAPE:** (See Figure 9)

1 = Cuneate 2 = Acute 3 = Obtuse 4 = Cordate 5 = Truncate 6 = Lobed 7 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TERMINAL LEAFLET MARGIN WAVINESS:

1 = Absent 2 = Slight 3 = Weak 4 = Medium 5 = Strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

NUMBER OF PRIMARY LEAFLET PAIRS: (See Figure 6)

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

PRIMARY LEAFLET TIP SHAPE: (See Figures 6 and 8)

1 = Acute 2 = Cuspidate 3 = Acuminate 4 = Obtuse 5 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PRIMARY LEAFLET SIZE:

1 = Very Small 2 = Small 3 = Medium 4 = Large 5 = Very Large

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PRIMARY LEAFLET SHAPE: (See Figures 6 and 7)

1 = Narrowly ovate 2 = Medium ovate 3 = Broadly ovate 4 = Lanceolate 5 = Elliptical 6 = Ovate 7 = Oblong 8 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PRIMARY LEAFLET BASE SHAPE: (See Figures 6 and 9)

1 = Cuneate 2 = Acute 3 = Obtuse 4 = Cordate 5 = Truncate 6 = Lobed 7 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

NUMBER OF SECONDARY AND TERTIARY LEAFLET PAIRS: (See Figure 6)

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

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5. LEAF CHARACTERISTICS: (continued)

NUMBER OF INFLORESCENCE/PLANT:

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

NUMBER OF FLORETS/INFLORESCENCE:

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

* COROLLA INNER SURFACE COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Measure predominant color of newly open flower and circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

* COROLLA OUTER SURFACE COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Measure predominant color of newly open flower and circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

* COROLLA INNER SURFACE COLOR: (Measure predominant color of newly open flower, if flowers are bi-color please use the ratio codes)
 1 = White 2 = Red-violet 3 = Blue-violet 4 = Cream 5 = Red-purple 6 = Blue 7 = Pink 8 = Pink-white 9 = Purple 10 = Violet
 11 = Purple-violet 13 = Violet-White 1:1 14 = Violet-White 1:3 15 = Violet-White 3:1 16 = Violet-White Halo 17 = Pink-White 1:1 18 = Pink-White 1:3
 19 = Pink-White 3:1 20 = Pink-White Halo 21 = RedViolet-White 1:1 22 = RedViolet-White 1:3 23 = RedViolet-White 3:1
 24 = RedViolet-White Halo 25 = BlueViolet-White 1:1 26 = BlueViolet-White 1:3 27 = BlueViolet-White 3:1 28 = BlueViolet-White Halo
 12 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

COROLLA SHAPE: (See Figure 10)

1 = Very rotate 2 = Rotate 3 = Pentagonal 4 = Semi-stellate 5 = Stellate

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

6. INFLORESCENCE CHARACTERISTICS:

CALYX ANTHOCYANIN COLORATION:

1 = Absent 3 = Weak 5 = Medium 7 = Strong 9 = Very strong

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

ANTHER COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsel Color Chart (Measure when newly opened flower is fully expanded and circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

ANTHER SHAPE: (See Figure 11)

1 = Broad cone 2 = Narrow cone 3 = Pear-shaped cone 4 = Loose 5 = Other

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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6. INFLORESCENCE CHARACTERISTICS: (continued)

POLLEN PRODUCTION:

1 = None 3 = Some 5 = Abundant

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

STIGMA SHAPE: (See Figure 12)

1 = Capitate 2 = Clavate 3 = Bi-lobed

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

STIGMA COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

BERRY PRODUCTION: (Under field conditions)

1 = Absent 3 = Low 5 = Moderate 7 = Heavy 9 = Very Heavy

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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7. TUBER CHARACTERISTICS:

*** PREDOMINANT SKIN COLOR:**

1 = White 2 = Light Yellow 3 = Yellow 4 = Buff 5 = Tan 6 = Brown 7 = Pink 8 = Red 9 = Purplish-red
 10 = Purple 11 = Dark purple-black 12 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PREDOMINANT SKIN COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SECONDARY SKIN COLOR:

1 = Absent 2 = Present (please describe)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SECONDARY SKIN COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Circle the appropriate color)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SECONDARY SKIN COLOR DISTRIBUTION: (See Figure 13)

1 = Eyes 2 = Eyebrows 3 = Splashed 4 = Scattered 5 = Spectacled 6 = Stippled 7 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SKIN TEXTURE:

1 = Smooth 2 = Rough (flaky) 3 = Netled 4 = Russetted 5 = Heavily russetted 6 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

7. TUBER CHARACTERISTICS: (continued)

* TUBER SHAPE: (See Figure 14)

1 = Compressed 2 = Round 3 = Oval 4 = Oblong 5 = Long 6 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TUBER THICKNESS:

1 = Round 2 = Medium thick 3 = Slightly flattened 4 = Flattened 5 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TUBER LENGTH (mm):

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

STANDARD DEVIATION:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

AVERAGE WEIGHT OF SAMPLE TAKEN:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TUBER WIDTH (mm)

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V	to	R1	to	R2	to	R3	to	R4	to
---	----	----	----	----	----	----	----	----	----

STANDARD DEVIATION:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

AVERAGE WEIGHT OF SAMPLE TAKEN (g):

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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7. TUBER CHARACTERISTICS: (continued)

TUBER THICKNESS (mm):

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V		to	R1		to	R2		to	R3		to	R4		to
---	--	----	----	--	----	----	--	----	----	--	----	----	--	----

STANDARD DEVIATION:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

AVERAGE WEIGHT OF SAMPLE TAKEN (g):

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TUBER EYE DEPTH:

1 = Protruding 3 = Shallow 5 = Intermediate 7 = Deep 9 = Very deep

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

TUBER LATERAL EYES:

1 = Protruding 3 = Shallow 5 = Intermediate 7 = Deep 9 = Very deep

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

NUMBER EYE/TUBER:

AVERAGE:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

RANGE:

V		to	R1		to	R2		to	R3		to	R4		to
---	--	----	----	--	----	----	--	----	----	--	----	----	--	----

DISTRIBUTION OF TUBER EYES:

1 = Predominantly apical 2 = Evenly distributed

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PROMINENCE OF TUBER EYEBROWS:

1 = Absent 2 = Slight prominence 3 = Medium prominence 4 = Very prominent 5 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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7. TUBER CHARACTERISTICS: (continued)

PREDOMINANT TUBER FLESH COLOR

1 = White 2 = Light Yellow 3 = Yellow 4 = Buff 5 = Tan 6 = Brown 7 = Pink 8 = Red 9 = Purplish-red
 10 = Purple 11 = Dark purple-black 12 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PRIMARY TUBER FLESH COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SECONDARY TUBER FLESH COLOR:

1 = Absent 2 = Present, please describe: _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SECONDARY TUBER FLESH COLOR CHART VALUE: Royal Horticulture Society Color Chart or Munsell Color Chart (Circle the appropriate color chart)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

NUMBER OF TUBERS/PLANT:

1 = Low (<8) 2 = Medium (8-15) 3 = High (>15)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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8. DISEASES CHARACTERISTICS:

DISEASES REACTION: 0 = Not Tested 1 = Highly Resistant 2 = Resistant Few Symptoms 3 = Resistance Few Lesions in Number and Size
 4 = Moderately Resistance 5 = Intermedia Susceptible 6 = Moderate Susceptible
 7 = Susceptible 9 = Highly Susceptible

LATE BLIGHT: (Phytophthora)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

EARLY BLIGHT: (Alternaria)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

SOFT ROT (Erwinia)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

COMMON SCAB (Streptomyces)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

POWDERY SCAB (Spongospora)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

DRY ROT (Fusarium)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

POTATO LEAF ROLL VIRUS (PLRV)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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8. DISEASES CHARACTERISTICS: (continued)

POTATO VIRUS X (PVX)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

POTATO VIRUS Y (PVY)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

POTATO VIRUS M (PVM)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

POTATO VIRUS A (PVA)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

GOLDEN NEMATODE (Globodera)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

ROOT - KNOT NEMATODE (Meloïdogyne)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

OTHER DISEASE _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

PHYSIOLOGICAL DISORDER

1 = Malformed shape 2 = Tuber cracking 3 = Feathering 4 = Hollow heart 5 = Internal necrosis
 6 = Blackheart 7 = Internal sprouting 8 = Other _____

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

9. PESTS CHARACTERISTICS:

PEST REACTION: 0 = Not Tested 1 = Highly Resistant 2 = Resistant Few Symptoms 3 = Resistance Few Lesions in Number and Size
 4 = Moderately Resistance 5 = Intermedia Susceptible 6 = Moderate Susceptible
 7 = Susceptible 9 = Highly Susceptible

COLORADO POTATO BEETLE (CPB) (*Leptinotarsa*)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

GREEN PEACH APHID (*Myzus*)

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

OTHER:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

OTHER:

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

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10. GENE TRAITS:

INSERTION OF GENES: 1 = YES 2 = NO

IF YES, describe the gene(s) introduced or attach information:

11. QUALITY CHARACTERISTICS:

CHIEF MARKET:

SPECIFIC GRAVITY (wt. air/wt. air – wt. water)

1 = <1.060 2 = 1.060-1.069 3 = 1.070-1.079 4 = 1.080-1.089 5 = >1.090

V	
---	--

R1	
----	--

R2	
----	--

R3	
----	--

R4	
----	--

TOTAL GLYCOALKALOID CONTENT (mg./100 g. fresh tuber)

V	
---	--

R1	
----	--

R2	
----	--

R3	
----	--

R4	
----	--

OTHER QUALITY CHARACTERISTICS: Describe any other quality characteristics that may aid in identification, (e.g., chip-processing, french fry processing, baking, boiling, after-cooking darkening). Please attach data and corresponding protocol.

12. CHEMICAL IDENTIFICATION:

Describe chemical traits of the candidate variety that aid in its identification (e.g., protien or DSN electrophoresis). Please attach data and the corresponding protocol.

13. FINGER PRINTING MARKERS:

ISOZYMES 1 = YES 2 = NO

IF YES, attach information

14. DNA PROFILE: 1 = YES 2 = NO

IF YES, attach information

15. ADDITIONAL COMMENTS AND CHARACTERISTICS:

Include any additional descriptors that would be useful in distinguishing the candidate variety.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

FOR OFFICIAL USE ONLY
PVPO NUMBER

EXHIBIT E - STATEMENT OF THE BASIS OF OWNERSHIP

1. Name of Owner 1. HZPC Holland B.V.	2. Temporary Designation or Experimental Name HZD 00- 277	3. Variety Name COLOMBA
---	---	-----------------------------------

4. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. YES NO

5. Is the applicant a U.S. national or a U.S. based entity? If no, give name of country. YES NO
The Netherlands

6. Is the applicant the original owner? YES NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
 YES NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
 YES NO If no, give name of country
The Netherlands

7. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT F
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S) HZPC Holland B.V.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) P.O. Box 88 NL-8500 AB Joure The Netherlands	TEMPORARY OR EXPERIMENTAL DESIGNATION HZD 00- 277
NAME OF OWNER REPRESENTATIVE (S) HZPC Americas Corp.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 19, Regis Duffy Drive West Royalty, C1E OK5 Charlottetown P.E.I. Canada	VARIETY NAME COLOMBA <hr/> FOR OFFICIAL USE ONLY <hr/> PVPO NUMBER

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I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature _____ Date 20th of November 2013

