No. 9700114

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

EPC 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 PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PERMITTED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

POTATO

'Felsina'

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-ninth day of September, in the year two thousand and six.

Attest:

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. 0581-0055

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

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

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.

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).

1. NAME OF OWNER
HZPC HOLLAND B.V.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME

3. VARIETY NAME
FELSINA

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
THE NETHERLANDS

5. TELEPHONE *(include area code)*

6. FAX *(include area code)*

FOR OFFICIAL USE ONLY
PVPO NUMBER
09700114
FILING DATE
Feb. 12, 1997

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
LIMITED COMPANY

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
NL

9. DATE OF INCORPORATION
juni 9, 1999

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
GLOBAL AGRI SERVICES
376 NEW MARYLAND HIGHWAY
NEW MARYLAND, N.B. E3C 1E5

FEES RECEIVED
FILING AND EXAMINATION FEES:
$ 2,450.00
DATE Feb 12, 1997
CERTIFICATION FEE:
$ 768.00
DATE July 21, 2006

11. TELEPHONE *(include area code)*

12. FAX *(include area code)*

13. E-MAIL
INFO@HZPC.NL

14. CROP KIND *(Common Name)*
POTATO

16. FAMILY NAME *(Botanical)*
SOLANUM

15. GENUS AND SPECIES NAME OF CROP
TUBEROSUM L.

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☑ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? *(OPTIONAL)*
☐ YES ☑ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
(Follow instructions on reverse)
a. ☑ Exhibit A. Origin and Breeding History of the Variety
b. ☑ Exhibit B. Statement of Distinctness
c. ☑ Exhibit C. Objective Description of Variety
d. ☐ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☑ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☐ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☑ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 21 and 22 below)* ☐ NO *(If "no", go to item 23)*

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☐ YES ☐ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

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?
☑ YES ☐ NO
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.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☑ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced 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 representations herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
NAME *(Please print or type)* M.F.W. JANSEN KLOMP		NAME *(Please print or type)* M.F.W. JANSEN KLOMP	
CAPACITY OR TITLE MANAGER HZPC R&D	DATE 01/26/2006	CAPACITY OR TITLE MANAGER HZPC R&D	DATE 01/26/2006

HZPC Holland B.V. P.O. BOX 88, 8500 AB Joure, The Netherlands

Original application form was sign on Sept. 1996
03/15/2006
LMC

(See reverse for instructions and information collection burden statement)

ST-470 (04-03) designed by the Plant Variety Protection Office using Word 2002.

INSTRUCTIONS

09700114

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank for $2,450 ($300 filing fee and $2,150 examination fee), payable to "Treasurer of the United States" *(See Section 97.175 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $300 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: (301) 504-5518

ITEM

16a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.

16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

16e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.

17. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant may NOT reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See P.L. 103-349 for additional information.)*

20. See Sections 41, 42, and 43 of the Act and Section 97.175 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center–East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB No. 0581-0055), Washington, DC 20503.

9700114

Hettema

Seed potatoes - Pommes de terre de semence
Saatkartoffeln - Papas de siembra

FELSINA

100 years

16A Revised Exhibit A: Origin and Breeding History of the Variety

The breeding of FELSINA was conducted in Flevoland, The Netherlands, the region where the trial field of the breeder S. Brunia is situated. The variety originates from the sexual crossing Morene * Gloria.

The pedigree of FELSINA is as follows:

MORENE * GLORIA

Date
Subject
Your reference
Our reference
Telephone number

FELSINA is derived from a convential crossing of the potato variety Gloria (father) and Morene (mother) (see attached description). Like all potato varieties, FELSINA has been multiplied vegetatively by clonal selection.

We have been testing the potato variety FELSINA 10 years within the company and 2 years officially (DUS-testing) in the Netherlands.

Since the seedling tuber, the variety is stable, at the moment 17 annual generations.

In the variety FELSINA the frequency of variants and off-types is very low and in the Dutch system of inspection of seed potatoes, variants and off-types are not accepted. Multiplication of the variety must be according the original description. In our system of clonal selection, we select according the original description, which means variants and off-types are not present.

The selection criteria for the subject variety was an early table potato, suitable for processing with resistance to the golden nematode and of course a range of agricultural characteristics as stated in the annex.

The breeding method is first to make an artificial cross Morene * Gloria. The true seeds derived from artificial cross Morene * Gloria are shown in the greenhouse and transformed in seedling tubers. In the population is started clonal selection during a period of about 8 years to select the variety. Then clonal selection is continued for multiplication of healthy basic seed to introduce the variety in the market.

Emmeloord, 1st October 1998

HETTEMA B.V.
Hettema

Ir. J.P. van Loon,
Managing Director Research & Development

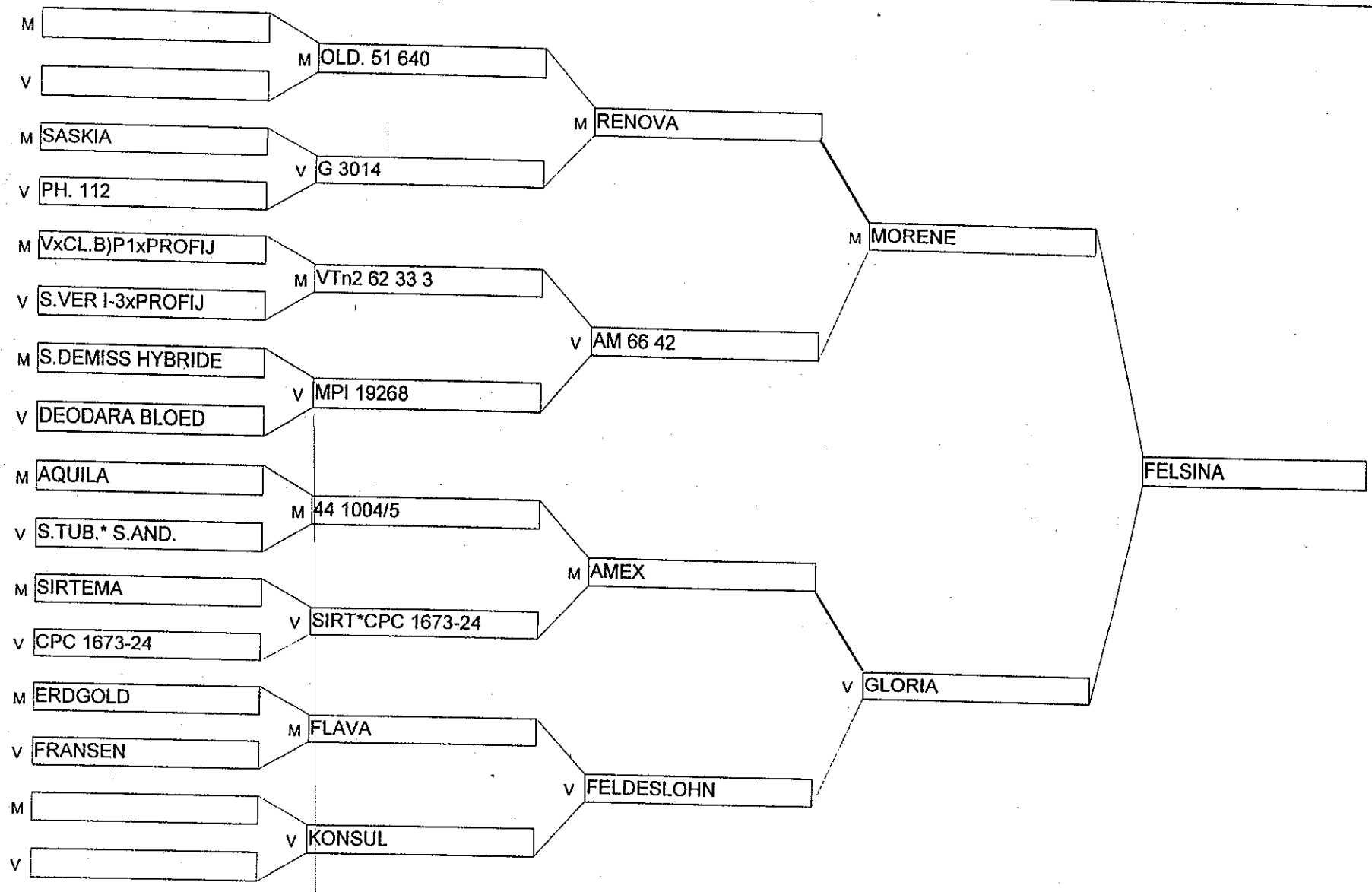
Hettema bv
Randweg 25
8304 AS Emmeloord (Holland)
P.O. Box 99
8300 AB Emmeloord (Holland)
Telephone (0)527 635000
Fax (0)527 635350/635234
Cables Hettema Emmeloord
Telex 42108 hzeo nl
Bankers ABN-Amro Emmeloord
nr. 47.12.29.547
HRG Lelystad nr. 39041060

EXHIBIT A

* M = Mother
V = Father

PEDIGREE

FELSINA



9700114

9700114

Hettema

100 years

Seed potatoes - Pommes de terre de semence
Saatkartoffeln - Papas de siembra

FELSINA

16B Revised Exhibit B: Statement of Distinctness

FELSINA is most similar to Yukon Gold. FELSINA differs from Yukon Gold in being an earlier variety. Also FELSINA is resistant to golden nematode (Globodera Rostochiensis) Ro1 + Ro4. FELSINA has a better resistance to tuber blight, PCN and virus diseases. FELSINA has a better grading and a higher yield. FELSINA has a pale yellow skin and a pale yellow flesh color.

Date
Subject
Your reference
Our reference
Telephone number

Cooking type B-C

Emmeloord, 1st October 1998

HETTEMA B.V.

Hettema

Ir. J.P. van Loon
Managing Director Research & Development

HETTEMA B.V.

Hettema bv
Randweg 25
8304 AS Emmeloord (Holland)
P.O. Box 99
8300 AB Emmeloord (Holland)
Telephone (0)527 635000
Fax (0)527 635350/635234
Cables Hettema Emmeloord
Telex 42108 hzeo nl
Bankers ABN-Amro Emmeloord
nr. 47.12.29.547
HRG Lelystad nr. 39041060

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Tests and Evaluation

SELECTION CRITERIA FELSINA Hettema H

...year of testing

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
general agricultural and morphological characteristics	●	●	●	●	●	●	●	●	●	●
cooking type				●	●	●	●	●	●	●
discoloration after cooking				●	●	●	●	●	●	●
crisps				●	●	●	●	●	●	●
french fries					●	●	●	●	●	●
potato cyst nematode		●		●		●		●		
wart disease				●		●		●		
late blight in foliage						●	●	●	●	●
late blight in tubers							●	●	●	●
scab						●	●	●	●	●
dry rot						●	●	●	●	●
spraing							●	●	●	●
erwinias						●	●	●	●	●
virus (PVYN, PLRV, PVX, PVA)							●	●	●	●
internal bruising					●	●	●	●	●	●
mechanical damage						●	●	●	●	●
TGA (total glycoalkaloid)						●	●	●	●	●
dormancy						●	●	●	●	●
drought									●	●

H100L6

Ministerie van Landbouw, Natuur en Voedselkwaliteit

09700114

HZPC Holland
Postbus 89
2500 AB JOURE

landbouw, natuur en voedselkwaliteit

Your letter of	your reference	our reference	date
		TRCPD/2006/580	20-02-2006
re:		extension no.	enclosures
Certificate of resistance		+31 (0)317 496865	

L.S.

According to official resistance tests, performed under supervision of the Dutch Plant Protection Service and Plant Research International, the potato variety

FELSINA

has, under conditions of the test, been found resistant to pathotype A of the potato cyst nematode (*Globodera rostochiensis*).

The inocula used in pcn resistance tests are from carefully selected origins which are representative for the pest in agricultural practice. In the test the level of infestation (Pi) was 38 cystes per gram of soil.

The susceptible control, Desiree, resulted in an increased of 17 x the original population. The resistant control, Saturna, reduced the population by 99%.

The Pf/Pi values of Felsina is listed below.

Variety	Pf/Pi cystes
Felsina	0,03

Plant Protection Service
Adres
Geertjesweg 15
Postal Address: PO Box 9102
6700 HC Wageningen
Telephone: 31 (0)317 496911
Fax: 31 (0)317 421701

MINISTERIE VAN LANDBOUW, NATUUR EN VOEDSELKWALITEIT PLANTENZIEKTENKUNDIGE DIENST NEDERLAND

Mrs. mr. F.M. Damme
Head, Dept. of Integrated Crop Protection

PLANTENZIEKTENKUNDIGE DIENST WAGENINGEN

09700114

Naam en adres kweker: S. Brunia, Morenelaan 6, 8317 AX Kraggenburg

Onderzoek: Wratziekte / AM, biotype: XXXXXX A Datum van ontvangst: 88 C:

PD. NO.	ZAAILING NO.	KRUISING	BEOORDELING
	80-118	76-10 x Ve 709	v
	-121	Cardinal x Morene	v
	-122		o
	~~-125~~ 125	Morene x Gloria	o
	-128		o
	-130	x L 29	o
	-131		v
	149	S 67-4-11 x Gloria	v
	-157	x L 29	v
	-158		v
	-160	x Ve 709	v
	-161	Gloria x 72-15 ~~x Morene~~	o
	-164		o
	-168	Primura x Ve 709	v

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The European Cultivated Potato Database

Felsina

HIGHER TAXON:	*Solanaceae*
GENUS:	*Solanum L.*
Solanum tuberosum L. cv. Felsina	
Pedigree:	Morene x Gloria (1972) [5,6,11,13,19,20]
Breeder:	S.Brunia, Morenelaan, Kraggenburg, NLD [5,11,13,19]
Breeder's rights:	No [13]
Synonyms:	
National list:	1992 [20] 1994 [11]

0 image(s)

ADMINISTRATION

Country of origin	NETHERLANDS [5, 6, 11, 13, 20]
Data source	CPVPA [5] CZEHBROD [6] FRA179 [11] GBR165 [13] NIVAA [19] POL IPR BON [20]
Plant health directive EC77/93, requirements	Fully tested [13] Part tested [6, 11, 20] Untested [5]
Plant material maintained as	Tuber [5, 13] In-vitro [6] Tuber and in-vitro [11, 20]
Sample status	Traditional cultivar/landrace [6] Advanced cultivar [5, 11, 13, 19, 20]
Test conditions	Organic [6] Non organic [13]

PLANT CHARACTERISTICS

Berries	Very rare [13, 19]
Flower colour	White [13, 19]
Flower frequency	Rare [13, 19]
Foliage cover	Moderate to good [13] Good to dense [19]
Growth habit	Spreading to semi erect [13, 19]
Light sprout colour	Pink [13, 19]
Maturity	Intermediate [13] Early [11, 19]

TUBER CHARACTERISTICS

Primary tuber flesh colour	Light yellow [13, 19] Yellow [11]
Tuber eye colour	Yellow [13, 19]
Tuber eye depth	Shallow [11, 13, 19]
Tuber shape	Oval [11, 13, 19]
Tuber skin colour	White to yellow [11, 13, 19]
Tuber skin texture	Smooth to intermediate [13, 19]

TUBERING CHARACTERISTICS

Dormancy period	Long [13]
Internal rust spot	Infrequent [11]
Resistance to external damage	Moderate to resistant [13]
Resistance to internal bruising	High [13, 19]
Storage ability	Good [11]
Tuber shape uniformity	Uniform [19] Uniform to very uniform [13]
Tuber size	Large to very large [11, 13, 19]
Tubers per plant	Many to very many [13]
Yield potential	High to very high [19]

UTILISATION CHARACTERISTICS

After cooking blackening	None to trace [13]
Cooking type / 411 Cooked texture	Mealy (floury type) to fairly firm (multi-purpose type) [11, 13]
Dry matter content	Medium to high [11] High [13] High to very high [19]
French fry suitability	Good [19]
Frying colour	Pale to medium [13]

RESISTANCE TO FUNGAL DISEASES

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Resistance to common scab (Streptomyces scabies)	Low to medium [11] Medium to high [19] High [13]
Resistance to dry rot (Fusarium spp.)	Medium [13]
Resistance to late blight on foliage (artificial inoculum in field)	Medium [19]
Resistance to late blight on foliage (laboratory test)	High [13]
Resistance to late blight on foliage (test method unspecified)	Medium [11]
Resistance to late blight on tubers (laboratory test)	Medium [13]
Resistance to late blight on tubers (artificial inoculum in field)	High [19]
Resistance to late blight on tubers (test method unspecified)	Medium [11]
Wart (Synchytrium endobioticum)	Susceptible [13] Field immune [11, 19]

RESISTANCE TO VIRUS DISEASES

Resistance to potato leaf roll virus	Low [11] Medium [13] Medium to high [19]
Resistance to potato virus A	Medium [13] Very high [11, 19]
Resistance to potato virus X	Medium [13] High to very high [19]
Resistance to potato virus Y (strain not specified)	Medium [11] Medium to high [19] High [13]
Resistance to tobacco rattle virus	High to very high [13]

RESISTANCE TO PESTS

Resistance to Globodera rostochiensis race 1	High [13, 19] Very high [11]
Resistance to Globodera rostochiensis race 4	Very high [11]

Felsina

Source:

[5]	**Luca Lovatti**	1998	CPVPA, Italy
[6]	**Jaroslava Domkarova**	1997	Potato Research Institute, Czech Republic
[11]	**Daniel Ellisseche**	2000	Institut National de la Recherche Agronomique (INRA), France
[13]	**Maureen McCreath**	2000	Scottish Agricultural Science Agency (SASA), Scotland
[19]	**Henk R Baarveld**	2000	Netherlands Potato Consultative Institute, The Netherlands
[20]	**Ewa Zimnoch-Guzowska**	2000	Plant Breeding and Acclimatization Institute (IHAR), Poland

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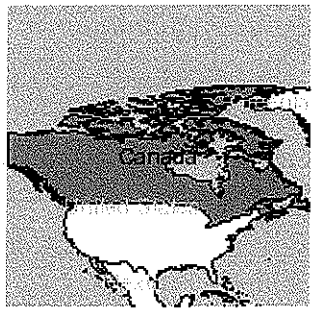
The European Cultivated Potato Database

Yukon Gold

HIGHER TAXON:	*Solanaceae*
GENUS:	*Solanum L.*
Solanum tuberosum L. cv. Yukon Gold	
Pedigree:	Norgleam x W 5279 4 [6,13]
Breeder:	University of Guelf, Ontario, Canada [13]
Breeder's rights:	Yes [13]
Synonyms:	
National list:	1992 [13]



0 image(s)

ADMINISTRATION

Country of origin	CANADA [6, 13]
Data source	CZEHBROD [6] GBR165 [13] IRL001 [16]
Plant health directive EC77/93, requirements	Fully tested [13] Infected [6] Untested [16]
Plant material maintained as	In-vitro [6] Tuber and in-vitro [13]
Sample status	Traditional cultivar/landrace [6] Advanced cultivar [13, 16]
Test conditions	Organic [6] Non organic [13]

PLANT CHARACTERISTICS

Berries	No berries [13]
Flower colour	Red violet [13]
Flower frequency	No flowers [13]
Foliage cover	Moderate to good [13]
Growth habit	Semi erect [13]
Light sprout colour	Pink [13]
Maturity	Early to intermediate [13]

TUBER CHARACTERISTICS

Primary tuber flesh colour	Light yellow [13]
Tuber eye colour	Red [13]
Tuber eye depth	Shallow [13]
Tuber shape	Oval to round [13]
Tuber skin colour	Part red [13]
Tuber skin texture	Smooth [13]

TUBERING CHARACTERISTICS

Dormancy period	Medium [13]
Resistance to external damage	Susceptible to moderate [13]
Resistance to internal bruising	Low to medium [13]
Tuber shape uniformity	Medium to uniform [13]

UTILISATION CHARACTERISTICS

After cooking blackening	None to trace [13]
Cooking type / 411 Cooked texture	Mealy (floury type) [13]
Dry matter content	Medium to high [13]

RESISTANCE TO FUNGAL DISEASES

Resistance to common scab (Streptomyces scabies)	Low to medium [13]
Resistance to gangrene (Phoma foveata)	Low to medium [13]
Resistance to late blight on foliage (laboratory test)	Low to medium [13]
Resistance to late blight on tubers (laboratory test)	Low [13]
Wart (Synchytrium endobioticum)	Susceptible [13]

RESISTANCE TO BACTERIAL DISEASES

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Resistance to blackleg (Erwinia spp.)	High to very high [13]

RESISTANCE TO VIRUS DISEASES

Resistance to potato leaf roll virus	Medium [13]
Resistance to potato virus A	Low to medium [13]
Resistance to potato virus X	Low to medium [13]
Resistance to potato virus Y (strain not specified)	Medium to high [13]

RESISTANCE TO PESTS

Resistance to Globodera pallida race 1	Very low to low [13]
Resistance to Globodera pallida race 2	Very low to low [13]
* **Resistance to Globodera rostochiensis race 1**	Low [13]

Source: Yukon Gold

[6]	**Jaroslava Domkarova**	1997	Potato Research Institute, Czech Republic
[13]	**Maureen McCreath**	2000	Scottish Agricultural Science Agency (SASA), Scotland
[16]	**Harry Kehoe**	1996	Oak Park Research Centre, Ireland

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Trial field results of [redacted] MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL	FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
CZEJIH 6	1999 1	105		87	70	LO	70	Y	Y	80		68										
CZEUTE 7	1999 1	78	70	72	75	LO	69	Y				45									32	
DEUSCH 7	1999 1	93		90	70	LO	70	Y	Y	70		60		BC	60	75					50	
DNKGIV 7	1999 1			82	75	OLO	74	LY	Y			75									56	
ESPRIO 6	1999 1	98		79	70	O	71	LY	Y			64										
FRACGN 7	1999 1	101		82	70	O	71					68					70	80				
FRACHT 7	1999 1	100		82	64	O	69	LY	Y			68										
FRALIL 7	1999 1	85		90	70	O	60	LY	Y	70		55		B	60	65	60	75				
FRAMON H	1999 1	100		87	70	LO	69	LY	Y			68										
FRANAN 7	1999 1	122		90	70	O	70	LY	Y	80		75	477	CD	60	80	60	65				
FRAREI H	1999 1	90		82	75	LO	74	LY	Y			75										
GRCDON M	1999 1	80	60	87	70	LO	70	LY	Y	80		62										
GRCLAK 6	1999 1	63	70	77	70	LO	74	LY	Y			60										
ITABOL H	1999 1	89	70	77	64	LO	74	LY				68										
NLDAPP 4	1999 1													B	60	70	65	63				
NLDAPP 4A	1999 1													B	60	70	70	65				
NLDAPP 5	1999 1													AB	60	70	70	60				
NLDAPP KD	1999 1													AB	60	70	70	50				
NLDAPP KD	1999 2													B	60	70	70	55				
NLDAPP KS	1999 1													B	60	70	70	65				
NLDAPP KS	1999 2													AB	60	70	70	65				
NLDAPP KW	1999 1	89	65	90	70	LO	70	Y	Y	60		60	392	AB	60	70	70	65				
NLDBAN 2T	1999 1											60										
NLDBAN 2T	1999 2		70			LO						52		AB		70						
NLDBAN 2T	1999 3																68	60				
NLDBAN 6H	1999 1	105		82	75	O	64	LY				68										
NLDBAN 7	1999 1	96	65	82	70	LO	69	LY	Y			68	440	BC		64	68	80				
NLDBAN 7	1999 2																66	50				
NLDBID SP	1999 1												437	BC	60	70	60	65				
NLDBID SP	1999 2													B	60	60	50	70				
NLDENS 7H	1999 1	64	60	82	72	O	66	LY	Y			64	437	B		69	70	80				
NLDENS 7H	1999 2																66	55				
NLDGOU 7	1999 1	99		84	70	O	66	LY	Y			68	440	BC		65	68	75				
NLDHOG 4	1999 1																				53	
NLDMET 3	1999 1	104		80	77	O	70	LY	Y	83		68								55	55	
NLDMET 5	1999 1	102		80	70	O	60	LY	Y	80		60										
NLDMET 7	1999 1	114	65	80	70	LO	70	Y	Y	80		70									50	
NLDMET 7	1999 2	90		80	70	O	70	LY	Y	80		65	497	C	60	70	70	70				
NLDMET 7	1999 3													BC	60	75	70	65				
NLDMTS 3	1999 1	97	65	87	70	O	67	LY	Y	80		68	474	BC	60	70	63	73				
NLDMTS 4	1999 1	89	65	85	70	O	70	LY	Y	75		63	462	C	60	73	70	70				
NLDMTS 4A	1999 1	85	70	80	70	O	70	LY	Y	80		65	448	B	60	70	70	70				
NLDMTS 5	1999 1	96	70	80	70	O	70	Y	Y	80		70	473	BC	60	70	70	65				
NLDMTS 5	1999 2																60	65				
NLDSWI 3	1999 1	94	65	90	70	LO	70	LY	Y	80		67	461	B	55	68	55	70				
NLDSWI 3	1999 2																60	67				
NLDSWI 4	1999 1	94	65	90	70	LO	70	Y	Y	80		68	479	BC	50	53	60	65				
NLDSWI 4A	1999 1	101	65	90	70	O	70	LY	Y	70		70	466	BC	60	70	70	60				
NLDSWI 5	1999 1	101	65	90	70	L	70	LY	Y	80		75	466	B	60	65	60	70				
NLDSWI 5	1999 2																60	65				
NLDSWI 7	1999 1	105	65	90	70	O	70	LY	Y	70		65	495	B	60	65	50	65				

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDSWI 7 1999 2													B	60	50	60	60				
NLDSWI KD 1999 1													BC	50	65	60	55				
NLDSWI KD 1999 2													B	60	50	50	65				
NLDSWI KD 1999 3													BC	50	60	60	70				
NLDSWI KS 1999 1													BC	60	65	60	70				
NLDSWI KS 1999 2													BC	60	60	60	65				
NLDSWI KS 1999 3													BC	60	60	60	65				
NLDSWI KW 1999 1	97	65	90	70	LO	70	LY	Y	80		70	475	BC	60	60	50	70				
NLDVRM 2 1999 1	110		80	80	O	60	Y	Y	70		65									45	
NLDVRP 7 1999 1																		57	67		
NLDZBE V 1999 1												460	D	60	75	60	70				
NLDZEW 7 1999 1	90	70	87	67	LO	64	LY	Y			60	458	C		61	68	70				
NLDZEW L 1999 1	94		82	72	LO	69	LY	Y			68	466				70	80				
NLDZEW L 1999 2																76	65				
NLDZEW L 1999 3																66	70				
NLDZEW V 1999 1	90		82	75	LO	69	LY	Y			71	464				72	60				
POLMLO 7 1999 1	100		82	64	OLO	69	LY	Y			52	437	C		75						
TURNEV 6 1999 1	79		75	70	LO	70	Y	Y	80		63										
Gemiddelde	94	66	84	71	OLO	69	LY	Y	77		65	459	BC	59	67	64	66	57	61	49	
waarnemingen	38	20	39	39	40	39	38	35	22		41	22	39	33	39	47	47	1	2	7	
CZEJIH 6 2000 1	98		80	70	LO	60	LY	Y	80		55										
DEUGRA 7 2000 1	91	65			O	75	Y				69	434	B	60	80						
DEUSCH 7 2000 1	110		80	70	LO	70	LY	Y	60		65	382	AB	60	65	60	65				
DEUWIN 7 2000 1	95	67			LO	75	LY				70	451	BC	60	65						
ESPALB 7 2000 1	63											399									
ESPRIO D 2000 1	93		80	70	LO	60	Y	Y	80		60										
FRACGN 7 2000 1	111		80	70	LO	70		LY			65	374									
FRACHA 7 2000 1	104		80	80	LO	70	LY	Y	80		65		BC	60	70	70	65				
FRACHT 7 2000 1	93		90	70	O	70	LY	Y	90		60		C	60	70	70	75				
FRALIL 7 2000 1	112		80	70	O	70	LY	Y	70		60		AB	70	70	70	75				
ITABOL 6 2000 1	103		80	70	LO	70	LY	Y	80		55										
NLDAPP 5 2000 1	85	68	80	70	O	70	LY	Y	80		60	429	BC	60	75	70	73				
NLDAPP KD 2000 1													B	60	60	70	60				
NLDAPP KD 2000 2													BC	60	50	50	45				
NLDAPP KD 2000 3													B	60	60	60	50				
NLDAPP KS 2000 1													BC	60	65	60	45				
NLDAPP KS 2000 2													B	60	65	60	50				
NLDAPP KS 2000 3													B	60	65	70	55				
NLDAPP KW 2000 1	74		80	70	LO	70	LY	Y	80		65	438	B	60	65	60	65				
NLDBAN 2T 2000 1													BC	60	60	70	70				
NLDBAN 3 2000 1	90	64	84	70	LO	68	LY	Y	72		62	514	B	60	60	63	63				
NLDBAN 4 2000 1	85	60	85	70	LO	70	LY	Y	75		65	514	B	60	65	60	70				
NLDBAN 4 2000 2																70	65				
NLDBAN 5 2000 1	99	60	80	70	LO	70	LY	Y	80		68	512	BC	60	65	60	65				
NLDBAN 5 2000 2																50	65				
NLDBNT 2T 2000 1													BC	70	60	50	65				
NLDBNT 4A 2000 1	93	62	90	70	LO	70	LY	Y	80		70	472	BC	60	63	63	68				
NLDBNT 4A 2000 2																40	55				
NLDGOU 7 2000 1	91		80	60	O	60	LY	Y	60		60	528	B	60	70	70	70				
NLDKRU KL 2000 1	114											466									

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDKRU ZA 2000 1	111											428									
NLDKWE 09 2000 1													AB	50	65	60	75				
NLDMET 3 2000 1	93							Y													
NLDMET 5 2000 1	89		80	65	O	70	LY	Y	75		60									58	
NLDMET 7 2000 1	69		80	70	O	70	LY	Y	80		50									50	
NLDMTS 2 2000 1													B	59	61	62	71				
NLDMTS 2D 2000 1													B	60	55	70	75				
NLDMTS 4 2000 1		65																			
NLDMTS 4A 2000 1	77	62	85	70	O	70	LY	Y	80		63	449	B	60	75	70	70				
NLDMTS 4A 2000 2																70	65				
NLDSWI 3 2000 1	77	67	88	70	LO	70	LY	Y	82		67	424	AB	58	67	62	59				
NLDSWI 3 2000 2																70	65				
NLDSWI 5 2000 1	79	68	85	70	O	70	Y	Y	85		65	411	B	50	65	60	65				
NLDSWI 5 2000 2																60	60				
NLDSWI 7 2000 1	95	70	80	70	O	70	LY	Y	80		65	456	B	60	65	60	65				
NLDSWI KD 2000 1													B	60	70	60	60				
NLDSWI KD 2000 2													BC	60	70	60	60				
NLDSWI KD 2000 3													B	60	65	60	65				
NLDSWI KS 2000 1													B	60	70	70	60				
NLDSWI KS 2000 2													B	60	65	70	50				
NLDSWI KS 2000 3													B	60	65	60	60				
NLDSWI KW 2000 1	85	65	90	80	LO	70	LY	Y	80		65	401	B	60	65	70	75				
NLDZEW 7 2000 1		70																			
POLMLO 7 2000 1	74		80	70	O	80	Y	Y	70		65	407	BC	70	80						
ROMSMA 9 2000 1	110																				
TURNEV 6 2000 1	96		80	70	O	60	Y	Y	80		60	374									40
Gemiddelde	92	65	82	70	OLO	69	LY	Y	77		63	441	B	60	66	63	64			54	40
waarnemingen	31	14	24	24	26	26	25	25	23		26	21	36	36	36	39	39			2	1
CZEJIH 6 2001 1	116		85	70	OLO	65	LY	Y	60	70	63										
DEUSCH 7 2001 1	91		80	70	OLO	70	LY	Y	70	70	65	431									
ESPEXT 9 2001 1			90	70	OLO	70	Y	Y	70		65	309									
FINYPP 7 2001 1	91		83	70	LOL	70	Y	Y	73	80	68									43	
FRACHA 7 2001 1	98		70	70	O	70	LY	Y			60		BC	70	70	70	65				
FRACHT 7 2001 1	96		80	60	OLO	60	LY	Y	60	70	55		C	70	70	70	55				
FRALIL 7 2001 1	109		80	80	O	60	LY	Y	80	80	65		BC	60	50	60	60				
NLDAPP 7 2001 1													B	60	70	70	65				
NLDAPP KD 2001 1													C	60	70	60	60				
NLDAPP KD 2001 2													BC	60	70	60	50				
NLDAPP KS 2001 1													BC	60	70	60	50				
NLDAPP KS 2001 2													B	70	70	60	55				
NLDAPP KW 2001 1												459	B	60	70	60	65				
NLDBAN 3 2001 1	107	65	80	72	OLO	70	LY	Y	70		65	475	BC	60	67	57	62				
NLDBAN 4 2001 1	94	65	80	70	LO	70	LY	Y	70		63	463	BC	60	65	60	65				
NLDBAN 5 2001 1	90	65	80	70	OLO	70	Y	Y	80	80	65	476	BC	60	70	60	60				
NLDBAN 5 2001 2																60	55				
NLDBAN 7 2001 1			80	60	O	60	LY	Y	70	70	60							84			
NLDBNT 4A 2001 1	97	65	80	70	OLO	65	LY				63	488	BC	60	68	65	70				
NLDBNT 4A 2001 2																55	50				
NLDGOU 7 2001 1	95	70										504	C	60	65	70	65				
NLDMET 3 2001 1	106		80	72	OLO	70	LY	Y	80	76	71										
NLDMET 5 2001 1	120		80	70	O	70	Y	Y	80		65										

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDMTS 2 2001 1													BC	60	66	64	71				
NLDMTS 2D 2001 1													CD	60	80	80	60				
NLDMTS 2T 2001 1													BC	65	65	65	70				
NLDMTS 4 2001 1	93	63	80	70	OLO	65	LY	Y	75	70	65	458	C	60	68	60	70				
NLDMTS 4 2001 2																65	65				
NLDMTS 4A 2001 1	90	68	80	75	OLO	70	Y	Y	75	75	65	467	C	60	70	70	55				
NLDMTS 4A 2001 2																70	65				
NLDMTS PR 2001 1		60											BC	70	65	80	75				
NLDSWI 3 2001 1	84	63	84	70	OLO	70	LY	Y	74	76	67	468	BC	57	60	60	67				
NLDSWI 3 2001 2																70	70				
NLDSWI 5 2001 1	83	60	80	70	OLO	70	LY	Y	70	70	60	468	BC	60	60	60	65				
NLDSWI 5 2001 2																60	55				
NLDSWI 7 2001 1	86	65	80	70	OLO	70	Y	Y	70	70	65	482	BC	60	60	60	60				
NLDSWI KD 2001 1													CD	60	65	60	65				
NLDSWI KD 2001 2													BC	60	55	50	60				
NLDSWI KD 2001 3													BC	60	70	60	60				
NLDSWI KS 2001 2													BC	60	65	60	65				
NLDSWI KS 2001 3													B	60	50	60	70				
NLDSWI KW 2001 1			80	70	OLO	70	LY	Y	70	70	60	494	BC	60	65	60	65				
NLDTZU 4 2001 1																				55	
NLDTZU 4A 2001 1								Y												50	
NLDTZU 5 2001 1																				55	
NLDTZU 7 2001 1																				65	
NLDTZU D 2001 1																				55	
NLDTZU G 2001 1																				55	
NLDTZU T 2001 1																				53	
NLDVRM 5 2001 1	124		80	70	OLO	60	LY	Y	80	80	60										
NLDVRM 6 2001 1	99		80	70	OLO	70	LY	Y	80	80	70										
POLMLO 7 2001 1	93		70	70	O	60	LY	Y	70	60	60										
Gemiddelde	98	64	80	70	OLO	67	LY	Y	73	73	64	460	BC	61	66	63	62		84	54	
waarnemingen	21	11	23	23	23	23	23	23	21	17	23	14	29	29	29	35	35		1	8	
CZEJIH 6 2002 1	101		80	70	OLO	60	LY	Y	65	70	60										
DEUMEH 7 2002 1	85		80	70	LO	60	LY	Y	70	80	55	450									
DEUSCH 7 2002 1	92		80	70	OLO	70	LY	Y	70	70	60	405									
DEUTHU 7 2002 1			80	60	LOL	70	LY	Y	70	70	60	375	A	60	60	60	55				
FINYPP 7 2002 1	115		80	65	LO	70	Y	Y	80	70	68	491								43	
FRACAV 7 2002 1	64		80	70	OLO	70	Y	Y	90	75	65										
FRACGN 7 2002 1	91		90	80	OLO	70	LY	Y	70	80	75	392									
FRACHA 7 2002 1	109		90	70	LO	70	LY	Y	80	80	65		BC	60	75	70	60				
FRACHT 7 2002 1	99		80	80	LO	70	LY	Y	80	70	65	493									
NLDALR G 2002 1																					60
NLDANN 5 2002 1																					50
NLDANN 7 2002 1																					50
NLDANN D 2002 1																					45
NLDANN T 2002 1																					35
NLDAPP 7 2002 1													A	60	70	70	65				
NLDBAN 7 2002 1	98		80	80	LO	70	LY	Y	80	70	70										
NLDBNT SP 2002 1												495	BC	60	70	60	70				
NLDGOU 7 2002 1	89	70	80	70	ROO	60	LY	Y	70	70	60	439	AB	60	65	60	55				
NLDKWE 73 2002 1												443									

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. IWW4V

TRIAL	FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDMET 3	2002 1	92		80	70	OLO	70	LY	Y	83	73	68										
NLDMET 5	2002 1	87		80	70	OLO	70	LY	Y	80	80	65										
NLDMTS 2	2002 1													B	60	69	69	68				
NLDMTS 3	2002 1	88		80	70	OLO	70	LY	Y	83	78	65	464	B	60	73	70	65				
NLDMTS 4	2002 1	71		80	70	OLO	70	Y	Y	80	70	65	440	BC	60	65	60	55				
NLDMTS 4A	2002 1	94		80	75	OLO	70	LY	Y	80	75	65	455	BC	60	65	70	63				
NLDMTS 4A	2002 2																50	50				
NLDMTS 5	2002 1	85		80	70	OLO	70	LY	Y	80	70	65	476	C	60	75	70	65				
NLDMTS 5	2002 2																60	55				
NLDMTS K	2002 1	88		80	80	OLO	60	LY	Y	80	70	65	439	B	60	70	70	60				
NLDMTS SP	2002 1			80	80	OLO	70	Y	Y	80	70	65	451	B	60	67	60	50				
NLDSWI 3	2002 1	87	64	80	73	OLO	68	LY	Y	80	73	65	402	B	60	65	67	63				
NLDSWI 3	2002 2																60	56				
NLDSWI 4	2002 1	66	70	80	70	LO	70	LY	Y	80	70	65	363	B	60	55	50	60				
NLDSWI 4	2002 2																50	60				
NLDSWI 4A	2002 1	83	68	80	75	OLO	70	Y	Y	80	75	63	428	BC	60	68	60	65				
NLDSWI 4A	2002 2																55	53				
NLDSWI 5	2002 1	103	65	80	80	OLO	70	LY	Y	80	80	65	393	BC	60	65	60	60				
NLDSWI 5	2002 2																60	60				
NLDSWI 7	2002 1	80	75	80	80	OLO	60	LY	Y	80	70	65	402	AB	60	65	60	60				
NLDSWI D	2002 1	82	60	80	70	LO	60	Y	Y	80	75	65	426	BC	60	60	70	65				
NLDSWI D	2002 2																60	55				
NLDSWI KA	2002 1													B	60	60	60	50				
NLDSWI KA	2002 2													BC	60	65	60	55				
NLDSWI KA	2002 3													BC	60	70	70	50				
NLDSWI KD	2002 1													AB	60	70	60	50				
NLDSWI KD	2002 2													AB	60	65	60	65				
NLDSWI KD	2002 3													A	60	65	60	50				
NLDSWI KK	2002 1													C	60	70	60	55				
NLDSWI KK	2002 2													AB	60	65	60	55				
NLDSWI KK	2002 3													B	60	65	70	60				
NLDSWI KW	2002 1	91	70	80	70	O	60	LY	Y	80	80	65	408	AB	60	60	60	65				
NLDSWI WI	2002 1													B	60	70	60	60				
NLDSWI WI	2002 2													B	60	65	70	55				
NLDSWI WI	2002 3													AB	60	65	60	50				
NLDTZU 4A	2002 1																				55	
NLDTZU 5	2002 1																				50	
NLDTZU 7	2002 1																				50	
NLDTZU D	2002 1																				55	
NLDTZU T	2002 1																				60	
NLDVRM 6	2002 1	87		80	70	OLO	60	LY	Y	80	80	55										
NLDWAG RH	2002 1	170	60			O		W	Y			65	388	BC		60			70			
POLMLO 7	2002 1	104		80	70	LO	65	LY	Y	75	75	60										
Gemiddelde		93	67	81	72	OLO	67	LY	Y	78	74	64	431	B	60	66	62	58	70		52	48
waarnemingen		27	9	28	28	29	28	29	29	28	28	29	23	32	31	32	38	38	1		6	5
CZEJIH 6	2003 1	90		80	70	O	70	Y	Y	65	60	55									50	
DEUMEH 7	2003 1	85		70	70	ROO	70	LY	Y	80	80	60	436									
FINYPP 7	2003 1	88		80	65	O	70	Y	Y	65	70	63	352									
FRACGN 3	2003 1													C	60	70	60	65				
FRACGN 7	2003 1	65		80	70	ROO	50	Y	Y	60	70	50	467									

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL	FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
FRACHA 7	2003 1	71		80	70	OLO	50	LY	Y	60	70	55		BC	60	70	70	70				
FRACHT 7	2003 1	83		80	70	O	70	Y	Y	80	80	60		C	60	70	70	65				
NLDALR G	2003 1																					47
NLDANN 5	2003 1																					25
NLDANN 7	2003 1																					35
NLDANN D	2003 1																					47
NLDANN T	2003 1																					39
NLDAPP 7	2003 1													BC	60	75	80	75				
NLDBAN 5	2003 1	124		80	70	OLO	70	LY	Y	80	70	75										
NLDBAN 7	2003 1	111		80	70	OLO	60	Y	Y	80	80	65										
NLDENS D	2003 2	91											466									
NLDGOU 7	2003 1	79	70	80	70	O	70	Y	Y	80	75	70	501	BC	60	70	70	65				
NLDKAS G0	2003 1	86	60	70	70	O	70	LY	LY	80	80	65	489	BC	60	65	70	65				
NLDKAS G0	2003 3																60	55				
NLDMET 3	2003 1	94		80	76	LO	70	LY	Y	80	74	68										
NLDMET 3D	2003 1	102		80	70	OLO	70	LY	Y	80	80	70								35		
NLDMET 4T	2003 1	98		80	70	LO	70	LY	Y	70	65	60								58		
NLDMTS 2	2003 1													C	63	70	73	69				
NLDMTS 3	2003 1	76	66	88	74	LO	64	LY	Y	80	78	61	492	BC	55	71	68	65				
NLDMTS 4	2003 1	88	65	80	80	O	70	LY	Y	90	80	65	471	C	60	70	70	55				
NLDMTS 4A	2003 1	82	60	80	73	OLO	67	LY	Y	80	77	58	489	C	67	72	73	65				
NLDMTS 4A	2003 2																70	70				
NLDMTS 4D	2003 1	94	65	80	70	OLO	70	LY	Y	70	70	70	468	BC	60	70	60	60				
NLDMTS 4D	2003 2														60		60	50				
NLDMTS 4D	2003 3																50	55				
NLDMTS 5	2003 1	78	60	90	70	ROO	60	LY	Y	80	70	60	450	BC	60	75	70	70				
NLDMTS DI	2003 1													C	60	70	70	70				
NLDMTS K	2003 1	106	65	90	70	LO	70	LY	Y	90	80	65	485	C	60	70		65				
NLDSWI 3	2003 1	86	76	82	76	O	64	LY	Y	78	72	64	476	BC	62	65	62	68				
NLDSWI 3	2003 2																60	63				
NLDSWI 4	2003 1	104	65	80	80	O	70	Y	Y	80	80	70	513	CD	60	70	70	70				
NLDSWI 4	2003 2																70	60				
NLDSWI 4A	2003 1	85	67	80	77	ROO	63	LY	Y	80	80	60	491	BC	60	67	63	72				
NLDSWI 4A	2003 2																63	70				
NLDSWI 5	2003 1	97	65	80	70	O	60	LY	Y	80	80	60	503	BC	60	70	60	75				
NLDSWI 5	2003 2																60	65				
NLDSWI 7	2003 1	87	65	80	70	O	70	LY	Y	80	80	65	508	BC	60	65	60	65				
NLDSWI D	2003 1	115	65	80	80	ROO	70	LY	Y	80	70	75	488	BC	60	60	60	60				
NLDSWI D	2003 2																50	60				
NLDSWI KA	2003 1													BC	60	70	70	65				
NLDSWI KA	2003 2													BC	60	70	70	55				
NLDSWI KA	2003 3													BC	60	70	50	60				
NLDSWI KD	2003 1													C	60	70	50	70				
NLDSWI KD	2003 2													BC	60	65	50	70				
NLDSWI KD	2003 3													CD	60	65	70	65				
NLDSWI KK	2003 1													C	60	65	50	65				
NLDSWI KK	2003 2													BC	60	75	60	60				
NLDSWI KW	2003 1	94	70	80	70	OLO	60	LY	Y	70	60	65	472	BC	60	65	70	75				
NLDSWI KW	2003 2													C	70	75	70	70				
NLDSWI T	2003 1	88	70	70	80	OLO	70	Y	Y	70	70	65	521	C	60	40	40	60				
NLDSWI T	2003 2																50	60				

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1ww4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDSWI T 2003 3																50	65				
NLDSWI WI 2003 1													C	60	70	70	65				
NLDSWI WI 2003 2													BC	60	75	70	50				
NLDSWI WI 2003 3													BC	60	70	70	65				
NLDVRM 5 2003 1	98		80	70	LO	60	LY	Y	70	70	60										
NLDVRM 6 2003 1			80	70	LO	70	LY	Y	80	70	65										
POLMLO 7 2003 1	97		75	65	RO	60	Y	Y	60	60	55										
Gemiddelde	91	66	80	72	O	66	LY	Y	76	73	63	477	BC	60	69	63	64		47	50	39
waarnemingen	30	16	30	30	30	30	30	30	30	30	30	20	34	35	34	44	45		2	1	5
CANPEI 4C 2004 1			80	70	O	70	Y	Y	80	80	65		A	70	70						
CANPEI 4C 2004 7																90	60				
CANPEI 4C 2004 9																80	60				
DEUMEH 7 2004 1	90		80	70	OLO	60	LY	Y	70	70	55	467									
FRACHA 7 2004 1	101		80	70	O	60	LY	Y	75	75	60										
FRACHA 7 2004 4												434	BC	60	70	70	60				
NLDALR G 2004 1																					40
NLDANN 5 2004 1																					35
NLDANN 7 2004 1																					45
NLDANN D 2004 1																					50
NLDAPP 3 2004 1			75	70	O	60	Y	Y	78	73	56										
NLDAPP 7 2004 2													AB	60	70	70	65				
NLDBAN 5 2004 1	95		80	70	O	60	LY	Y	70	80	60										
NLDBAN 7 2004 1	86		70	70	O	70	LY	Y	70	70	60								79		
NLDGOU 7 2004 1	89	70	80	70	OLO	80	Y	Y	80	70	65	474									
NLDGOU 7 2004 6													B	60	65	60	55				
NLDMET 3 2004 1								Y													
NLDMET G 2004 1								Y													
NLDMTS 2 2004 1													BC	61	69	69	64				
NLDMTS 2T 2004 1													BC	60	60	50	55				
NLDMTS 4A 2004 1	70		75	75	OLO	65	LY	Y	80	75	60										
NLDMTS 4A 2004 3												445	BC	60	70	70	50				
NLDMTS 4A 2004 6																65	48				
NLDMTS 5 2004 1	72		70	70	O	60	LY	Y	80	70	60										
NLDMTS 5 2004 3												484	BC	60	70	70	60				
NLDMTS 5 2004 7																60	50				
NLDMTS K 2004 1	87		80	70	OLO	60	Y	Y	80	70	60	500									
NLDMTS K 2004 2													B	60	75	70	45				
NLDMTS K5 2004 4													B	60	65	70	50				
NLDMTS K5 2004 6													BC	60	75	70	40				
NLDMTS K5 2004 8																60	50				
NLDMTS KL 2004 4													B	60	65	70	50				
NLDMTS KL 2004 6													B	60	70	60	45				
NLDMTS KL 2004 8																70	50				
NLDSWI 3 2004 1	68	63	78	68	O	60	LY	Y	80	70	60										
NLDSWI 3 2004 3												392	AB	60	71	70	62				
NLDSWI 3 2004 6																68	51				
NLDSWI 4 2004 1	75	65	80	70	OLO	60	LY	Y	85	75	60										
NLDSWI 4 2004 4												395	BC	60	68	65	60				
NLDSWI 4 2004 6																55	53				
NLDSWI 4A 2004 1	76	65	80	70	O	60	LY	Y	80	75	63										

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. IWW4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDSWI 4A 2004 3												386	BC	60	63	65	60				
NLDSWI 4A 2004 6																70	50				
NLDSWI 5 2004 1	91	65	80	70	ROO	60	Y	Y	90	70	55										
NLDSWI 5 2004 4												426	B	60	60	60	50				
NLDSWI 5 2004 7																70	50				
NLDSWI 7 2004 1	89	70	80	80	OLO	60	LY	Y	80	80	60	406									
NLDSWI 7 2004 4													B	60	70	70	70				
NLDSWI G 2004 1	70	60	70	70	OLO	60	LY	Y	80	80	55										
NLDSWI G 2004 4												434	B	60	65	70	55				
NLDSWI G 2004 6																70	50				
NLDSWI K5 2004 4													B	60	65	70	55				
NLDSWI K5 2004 6													BC	60	65	70	50				
NLDSWI K5 2004 8																60	60				
NLDSWI KL 2004 4													AB	60	60	70	55				
NLDSWI KL 2004 6													B	60	70	60	50				
NLDSWI KL 2004 8																50	40				
NLDSWI KW 2004 1	85		80	80	OLO	60	LY	Y	80	80	65	438									
NLDSWI KW 2004 2													BC	60	70	70	55				
NLDTZU 4 2004 1																				48	
NLDTZU 4A 2004 1																				48	
NLDTZU 5 2004 1																				53	
NLDTZU 7 2004 1																				53	
NLDTZU D 2004 1																				70	
NLDTZU G 2004 1																				45	
NLDVRM 5 2004 1			80	70	O	70	LY	Y	80	70	70								55		
NLDVRM 6 2004 1			80	70	O	60	LY	Y	80	70	65										
Gemiddelde	83	65	78	71	O	63	LY	Y	79	74	61	437	B	60	68	67	54		67	53	43
waarnemingen	15	7	19	19	19	19	19	21	19	19	19	13	24	24	24	36	36		2	6	4
DEUMEH 7 2005 1	100		80	60	OLO	60	LY	Y	70	80	55	446									
FRACHA 7 2005 1	108		90	70	LO	60	LY	Y	80	70	60										
NLDANN 7 2005 1																					40
NLDANN D 2005 1																					40
NLDANN G 2005 1																					40
NLDANN T 2005 1																					40
NLDAPP 7 2005 3													C	60	70	70	65				
NLDBAN 4 2005 1	99		80	70	OLO	60	LY	Y	80	80	60										
NLDBAN 5 2005 1	101		80	70	LO	60	LY	Y	70	80	65										
NLDBAN 7 2005 1	96		80	70	OLO	70	LY	Y	80	70	70										
NLDGOU 7 2005 1	98	60	80	70	O	70	Y	Y	80	60	65										
NLDGOU 7 2005 6												448									
NLDGOU KW 2005 1	95	60	90	70	O	70	Y	Y	80	70	65										
NLDGOU KW 2005 3													CD	60	70	70	60				
NLDMET 3 2005 1	98		80	73	OLO	60	LY	Y	77	77	60										
NLDMET G 2005 1	98		80	70	O	60	LY	Y	80	80	60										
NLDMTS 4A 2005 1	89	65	85	70	O	60	LY	Y	80	80	63										
NLDMTS 4A 2005 4												474	BC	60	70	65	60				
NLDMTS 5 2005 1	85	65	80	60	LO	60	Y	Y	80	70	60										
NLDMTS 5 2005 4												451	BC	60	70	70	65				
NLDSWI 3 2005 1	85	68	78	72	O	62	Y	LY	80	78	64										
NLDSWI 3 2005 3												446	C	60	73	65	63				
NLDSWI 4 2005 1	88	65	80	70	O	60	LY	Y	80	80	65										

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Trial field results of FELSINA MATERNAL MORENE PATERNAL GLORIA Geniteur
Rostoch. 1WW4V

TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
NLDSWI 4 2005 4												435	B	70	70	70	60				
NLDSWI 4A 2005 1	89	70	80	70	O	65	LY	Y	80	80	63										
NLDSWI 4A 2005 3												435	BC	60	70	60	65				
NLDSWI 5 2005 1	83	60	80	60	O	60	LY	Y	80	80	60										
NLDSWI 5 2005 3												432	C	60	70	70	65				
NLDSWI 7 2005 1	84	65	70	70	ROO	60	LY	LY	80	80	60										
NLDSWI 7 2005 4													CD	60	70	70	70				
NLDSWI G 2005 1	80	70	70	70	O	60	LY	LY	80	80	55										
NLDSWI KW 2005 1	92	70	80	70	ROO	60	LY	Y	80	80	55										
NLDSWI KW 2005 3													BC	60	70	70	60				
NLDSWI SP 2005 1		60	80	70	ROO	60	LY	Y	80	80	60										
NLDTZU 4 2005 1																				60	
NLDTZU 4A 2005 1																				58	
NLDTZU 5 2005 1																				60	
NLDTZU 7 2005 1																				60	
NLDTZU D 2005 1																				60	
NLDTZU G 2005 1																				60	
NLDTZU T 2005 1																				65	
NLDVRM 5 2005 1			80	70	OLO	60	LY	LY	80	80	65								70		
NLDVRM 6 2005 1			80	70	OLO	60	LY	Y	80	80	65										
Gemiddelde	93	65	80	69	O	62	LY	Y	79	77	62	446	C	61	70	68	63		70	60	40
waarnemingen	18	12	21	21	21	21	21	21	21	21	21	8	10	10	10	10	10		1	7	4
Totaal gemiddelde	93	66	81	71	OLO	67	LY	Y	77	74	63	451	BC	60	67	64	62	64	63	54	42
Totaal waarnemingen	180	89	184	184	188	186	185	184	164	115	189	121	204	198	204	249	250	2	8	37	19

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RY RELATIVE YIELD
MA MATURITY
TS TUBER SIZE
SD SIZE DISTRIBUTION
SH SHAPE
SU SHAPE UNIFORMITY
FC FLESH COLOUR
SK SKIN COLOUR
BS BRIGHTNESS SKINCOLOUR
SM SMOOTHNESS SKIN
OI OVERALL IMPRESSION
UW UNDERWATERWEIGHT
CT COOKING TYPE
FL FLESHCOLOR AFTER COOKING
AD AFTERCOOKING DARKENING
GP GREY AFTER PREFRYING
SF SECOND FRY
LF LATE BLIGHT FOLIAGE
LT LATE BLIGHT TUBER
CS COMMON SCAB
PO POWDERY SCAB

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Trial field results of [redacted] MATERNAL NORGLEAM PATERNAL W 52 79 4
Rostoch.

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TRIAL FIELD	RY	MA	TS	SD	SH	SU	FC	SK	BS	SM	OI	UW	CT	FL	AD	GP	SF	LF	LT	CS	PO
CANNTI GM 1999 2	80		80									414									
CANNTI GM 1999 3	73		90									419									
CANNTI GM 1999 4	85											410									
CANNTI GM 1999 5												431									
USADIL 9 1999 1	66																				
USAMAR 9 1999 1	60																				
Gemiddelde	73		85									419									
waarnemingen	5		2									4									
CANNBR 9 2000 1	72		80	80	R	80		Y	80		80	362									
CANNBR 9 2000 2	126											337									
Gemiddelde	99		80	80	R	80		Y	80		80	350									
waarnemingen	2		1	1	1	1		1	1		1	2									
CANNBR Q 2002 1			80	70	RRO	70	Y	Y	70	70	70		B		60	70	80				
Gemiddelde			80	70	RRO	70	Y	Y	70	70	70		B		60	70	80				
waarnemingen			1	1	1	1	1	1	1	1	1			1	1	1	1				
CANNBR 2C 2003 1			80	70	RO	70	Y	Y	70	70	70		BC		70	80		70			
CANNBR 2C 2003 3																	70	30			
CANNBR 3 2003 1	104		80	70	R	60	Y	Y	70	60	50										
CANNBR 3C 2003 1	95	55	80	70	O	60	Y	DY	70		75	419	AB		70	90		55			
CANNBR 3C 2003 3																	80	30			
Gemiddelde	100	55	80	70	RO	63	Y	Y	70	65	65	419	B		70	85	75	46			
waarnemingen	2	1	3	3	3	3	3	3	3	2	3	1	2		2	2	2	4			
CANNBR 4 2004 1	94		80	80	RRO	70	Y	Y	70	70	70										
CANNBR 4C 2004 1	108	53	80	70	RRO	60		Y	70	70	60	400	AB		70	80					
CANONT 4C 2004 1	104		80	80	RRO	80	LY	Y	80	70	70	425	B		70	80					
CANONT 4C 2004 7																	80	50			
CANONT 4C 2004 9																	80	70			
CANPEI 4C 2004 1			80	80	R	70	Y	Y	80	70	70		AB		70	80					
CANPEI 4C 2004 7																	60	40			
CANPEI 4C 2004 9																	80	60			
USANCA 4 2004 1	103		70	65	RO	60	LY	DY	75		65										
Gemiddelde	102	53	78	75	RRO	68	Y	Y	75	70	67	413	AB		70	80	75	55			
waarnemingen	4	1	5	5	5	5	4	5	5	4	5	2	3		3	3	4	4			
CANNBR 3 2005 1	105		90	60	R	70	Y	Y	70	70	60										
CANPEI 4C 2005 1			80	70	OLO	70	CR	LY	80	70	70										
NLDBAN I 2005 1			80	70	R	60	Y	Y	60	70	50										
USAFLO 4 2005 1	126	65	80	80	RRO	70	LY	DY	70	70	65	357									
USANCA 4 2005 1	89		85	70	RO	60		Y	65												
USAWAS RB 2005 1	84		90	80	LO	70	LY	LY	70	70	65	295									
USAWAS SH 2005 1	91		80	70	LO	70	LY	Y	70	60	60	287									
Gemiddelde	99	65	84	71	ROO	67	LY	Y	69	68	62	313									
waarnemingen	5	1	7	7	7	7	6	7	7	6	6	3									
Totaal gemiddelde	93	58	81	73	RO	68	Y	Y	72	68	66	380	B		68	80	76	51			
Totaal waarnemingen	18	3	19	17	17	17	14	17	17	13	16	12	6		6	6	7	8			

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RY	RELATIVE YIELD	MA	MATURITY	TS	TUBER SIZE	SD	SIZE DISTRIBUTION
SH	SHAPE	SU	SHAPE UNIFORMITY	FC	FLESH COLOUR	SK	SKIN COLOUR
BS	BRIGHTNESS SKINCOLOUR	SM	SMOOTHNESS SKIN	OI	OVERALL IMPRESSION	UW	UNDERWATERWEIGHT
CT	COOKING TYPE	FL	FLESHCOLOR AFTER COOKING	AD	AFTERCOOKING DARKENING	GP	GREY AFTER PREFRYING
SF	SECOND FRY	LF	LATE BLIGHT FOLIAGE	LT	LATE BLIGHT TUBER	CS	COMMON SCAB
PO	POWDERY SCAB						

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Exhibit C (*Potato*)

OBJECTIVE DESCRIPTION OF VARIETY

POTATO (*Solanum tuberosum L.*)

NAME OF APPLICANT(S)
HZPC HOLLAND B.V.

FOR OFFICIAL USE ONLY
PVPO NUMBER
9700114

ADDRESS
P.O. Box 88
NL – 8500 AB Joure
The Netherlands

VARIETY NAME
Felsina

TEMPORARY OR EXPERIMENTAL DESIGNATION

REFERENCE VARIETY 1 (R1)
Yukon Gold

REFERENCE VARIETY 2 (R2)
Shepody

1. MARKET CHARACTERISTICS:

MARKET CLASS:
1 = Yellow-flesh tablestock; 2 = Round-white tablestock; 3 = Chip-processing; 4 = Frozen-processing
5 = Russet tablestock; 6 = Other_____

VARIETY	R1	R2
4	1	4

2. PLANT CHARACTERISTICS:

GROWTH HABIT:
1 = Erect (>45° with ground); 5 = Semi-erect (30-45° with ground); 7 = Spreading.

VARIETY	R1	R2
5	3	5

TYPE:
1 = Stem (foliage open, stems clearly visible: 2 = Intermediate; 3 = Leaf (foliage closed, stems hardly visible)

VARIETY	R1	R2
2	1	3

MATURITY: Days after planting (DAP) at vine senescence.

VARIETY	R1	R2
NA	NA	NA

PLANTING DATE:

VARIETY	R1	R2
May 27, 1997	May 27, 1997	May 27, 1997

REGION/AREA:

VARIETY	R1	R2
Tilley, New Brunswick	Tilley, New Brunswick	Tilley, New Brunswick

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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).

VARIETY	R1	R2
3	~~3~~ 4 LMC per 03/07/2006 Letter & Data	3

3. STEM CHARACTERISTICS: Measure at early first bloom

STEM ANTHOCYANIN COLORATION:

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

VARIETY	R1	R2
5	4-5	3

STEM WINGS

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

VARIETY	R1	R2
3	5	6-7

4. LEAF CHARACTERISTICS:

LEAF COLOR: Observe fully developed leaves located on middle ⅓ of plant

1 = Yellowish-green; 2 = Olive-green; 3 = Medium green; 4 = Dark green; 5 = Grey-green; 6 = other

VARIETY	R1	R2
1	1	1

LEAF COLOR: Observe fully developed leaves located on middle ⅓ of plant

Royal Horticulture Society Color Chart

VARIETY	R1	R2
146A	146A	146A

LEAF PUBESCENCE DENSITY:

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

VARIETY	R1	R2
3-4	3	3-4

LEAF PUBESCENCE LENGTH:

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

VARIETY	R1	R2
~~1~~ 2 JAP PER 02/27/00 LETTER	2	3

LEAF SILHOUETTE

1 = Closed; 3 = Medium; 5 = Open

VARIETY	R1	R2
3	5	3

PETIOLES ANTHOCYANIN COLORATION:
1 = Absent: 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

VARIETY	R1	R2
5	1-2	1

LEAF STIPULES SIZE
1 = Absent; 3 = Small; 5 = Medium: 7 = Large

VARIETY	R1	R2
5	6-7	5

TERMINAL LEAFLET SHAPE:
1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical; 6 = Obovate; 7 = Oblong; 8 = other

VARIETY	R1	R2
2	1	2

TERMINAL LEAFLET TIP SHAPE:
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = other

VARIETY	R1	R2
3	3	1-3

TERMINAL LEAFLET BASE SHAPE:
1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other

VARIETY	R1	R2
3-4	2-3	3-4

TERMINAL LEAFLET MARGIN WAVINESS:
1 = Absent; 2 = Slight; 3 = Weak; 4 = Medium; 5 = Strong

VARIETY	R1	R2
2	3	4

NUMBER OF PRIMARY LEAFLET PAIRS:
AVERAGE:

VARIETY	R1	R2
5.0	6.0	4.5

RANGE:

VARIETY	R1	R2
5-5	6-6	4-5

PRIMARY LEAFLET TIP SHAPE:
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other

VARIETY	R1	R2
1	1	1

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PRIMARY LEAFLET SHAPE:
1 = Narrowly ovate: 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical; 6 = Obovate; 7 = Oblong; 8 = Other

VARIETY	R1	R2
1	1	1

PRIMARY LEAFLET BASE SHAPE:
1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate: 6 = Lobed; 7 = Other

VARIETY	R1	R2
4	3	4

NUMBER OF SECONDARY AND TERTIARY LEAFLET PAIRS:
AVERAGE:

VARIETY	R1	R2
11.4	17.7	4.6

RANGE:

VARIETY	R1	R2
10-13	16-21	4-6

5. INFLORESCENCE CHARACTERISTICS:
NUMBER OF INFLORESCENCE / PLANT
AVERAGE

VARIETY	R1	R2
2.4	2.6	8.0

RANGE:

VARIETY	R1	R2
1-4	2-3	6-10

NUMBER OF FLORETS / INFLORESCENCE:
AVERAGE:

VARIETY	R1	R2
7.9	5	14.6

RANGE:

VARIETY	R1	R2
5-12	3-6	13-16

COROLLA INNER SURFACE COLOR: Measure predominant color of newly open flower RHSCC.

VARIETY	R1	R2
157C	85B	76A

COROLLA OUTER SURFACE COLOR: RHSCC

VARIETY	R1	R2
157C	76A	76A

COROLLA SHAPE:
1 = Very rotate; 2 = Rotate; 3 = Pentagonal; 4 = Semi-stellate; 5 = Stellate

VARIETY	R1	R2
3	3	3

CALYX ANTHOCYANIN COLORATION:
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very strong

VARIETY	R1	R2
5	3	3

ANTHER COLOR: Measure when newly opened flower is fully expanded RHSCC

VARIETY	R1	R2
17C	14A	14A

ANTHER SHAPE:
1 = Broad cone; 2 = Narrow cone; 3 = Pear shape cone; 4 = Loose; 5 = Other

VARIETY	R1	R2
2	1	1

POLLEN PRODUCTION:
1 = None; 3 = Some; 5 = Abundant

VARIETY	R1	R2
NA	NA	NA

STIGMA SHAPE:
1 = Capitate; 2 = Clavate; 3 = Bi-lobed

VARIETY	R1	R2
1	1	1

STIGMA COLOR: RHSCC

VARIETY	R1	R2
146A	138A	146A

BERRY PRODUCTION: UNDER FIELD CONDITIONS:
1 = None; 3 = low; 5 = Moderate; 7 = Heavy; 9 = Very heavy

VARIETY	R1	R2
5	1	1

6. 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

VARIETY	R1	R2
3-4	2	4

RHSCC:

VARIETY	R1	R2
161A	161A	161C

SECONDARY SKIN COLOR:

1 = Absent; 2 = Present, please describe

VARIETY	R1	R2
1	2	1

RHSCC:

VARIETY	R1	R2
NA	58C	NA

SECONDARY SKIN COLOR DISTRIBUTION:

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

VARIETY	R1	R2
NA	1	NA

SKIN TEXTURE:

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

VARIETY	R1	R2
1	1	1

TUBER SHAPE:

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

VARIETY	R1	R2
4-5	2	4-5

TUBER THICKNESS:

1 = Round: 2 = Medium thick: 3 = Slightly flatted; 4 = Flatted; 5 = Other

VARIETY	R1	R2
2	2	3

TUBER LENGTH (mm):
AVERAGE:

VARIETY	R1	R2
88.9	76.1	102.1

RANGE:

VARIETY	R1	R2
74-111	61-91	84-132

STANDARD DEVIATION:

VARIETY	R1	R2
9.4	8.8	11.5

AVERAGE WEIGHT OF SAMPLE TAKEN:

VARIETY	R1	R2
157	167	215

TUBER WIDTH (mm):
AVERAGE:

VARIETY	R1	R2
61.2	65.0	64.2

RANGE:

VARIETY	R1	R2
55-70	54-76	55-73

STANDARD DEVIATION:

VARIETY	R1	R2
3.6	5.4	4.6

AVERAGE WEIGHT OF SAMPLE TAKEN:

VARIETY	R1	R2
157	167	215

TUBER THICKNESS (mm):
AVERAGE:

VARIETY	R1	R2
48.4	52.4	54.4

RANGE:

VARIETY	R1	R2
40-83	44-59	45-61

STANDARD DEVIATION:

VARIETY	R1	R2
8.8	4.1	5.4

AVERAGE WEIGHT OF SAMPLE TAKEN:

VARIETY	R1	R2
157	167	215

TUBER EYE DEPTH:
1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very Deep

VARIETY	R1	R2
3	2	2

TUBER LATERAL EYES:
1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 Very deep

VARIETY	R1	R2
3	2	2

NUMBER EYE / TUBER:
AVERAGE:

VARIETY	R1	R2
8.2	8.8	9.4

RANGE:

VARIETY	R1	R2
7-11	8-10	8-10

DISTRIBUTION OF TUBER EYES:
1 = Predominantly apical; 2 = Evenly distributed

VARIETY	R1	R2
2	2	2

PROMINENCE OF TUBER EYEBROWS:
1 = Not prominent; 2 = Slight prominence; 3 = Medium prominence; 4 = very prominenece; 5 Other

VARIETY	R1	R2
2	2	3

PRIMARY TUBER FLESH COLOR: RHSCC

VARIETY	R1	R2
11B	11C	158B

SECONDARY TUBER FLESH COLOR:
1 = Absent; 2 = Present, please describe

VARIETY	R1	R2
1	1	1

RHSCC:

VARIETY	R1	R2
NA	NA	NA

NUMBER OF TUBER / PLANT:
1 = Low (<8); 2 = Medium (8-15); 3 = High(>15)

VARIETY	R1	R2
~~0~~ 1 SMPPER 02/27/00 LETTER	1	1

7. DISEASES CHARACTERISTICS:

DISEASES REACTION:
0 = Not tested; 1 = Resistant; 3 = Moderately resistant; 5 = Moderately susceptible; 7 = Susceptible; 9 = Highly susceptible

BACTERIAL RING ROT: Foliar reaction

VARIETY	R1	R2
0		

BACTERIAL RING ROT: Tuber reaction

VARIETY	R1	R2
0		

LATE BLIGHT

VARIETY	R1	R2
~~0~~ 3		

PLRV

VARIETY	R1	R2
~~0~~ 3		

PVX

VARIETY	R1	R2
~~0~~ 2		

PVY

VARIETY	R1	R2
~~0~~ 3		

OTHER P.V.A.

VARIETY	R1	R2
~~0~~ 2		

OTHER

VARIETY	R1	R2
0		

figures in red transferred from original Exhibit C 03/02/00 SMP

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8. PESTS CHARACTERISTICS:

PEST REACTION:

0 = Not tested; 1 = Resistant; 3 = Moderately resistant; 5 = Moderately susceptible; 7 = Susceptible; 9 = Highly susceptible

GOLDEN NEMATODE

VARIETY	R1	R2
Ø1 R01 + R04		

OTHER WART DISEASE

VARIETY	R1	R2
Ø3		

9. GENE TRAITS:

INSERTION OF GENES:

YES ☐ NO ■

IF YES, DESCRIBE

10. QUALITY CHARACTERISTICS:

CHIEF MARKET: french fry processing

SPECIFIC GRAVITY:

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

VARIETY	R1	R2
2	3	3

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

VARIETY	R1	R2

OTHER QUALITY CHARACTERISTICS:

12. CHEMICAL IDENTIFICATION:

13. ADDITIONAL COMMENTS AND CHARACTERISTICS:

table, stock, no discoloration, very suitable for processing into french fries.

figures in red transferred from original Exhibit C 03/02/005 MP

EXHIBIT D

9700114

Reference number of reporting authority: ARD 968

15. Characteristics included in the UPOV guidelines or national test guidelines

UPOV No.	Characteristics	States of expression	Note	Remarks
Lightsprout				
1	Size	medium	5	
2	Shape	conical	3	
3 G	Anthocyanin coloration base	red-violet	1	
4	Intensity anthocyanin coloration base	medium	5	
5	Pubescence base	weak to medium	4	
6	Size tip	medium	5	
7	Habit tip	medium	5	
8	Intensity anthocyanin coloration tip	weak to medium	4	
9	Pubescence tip	medium	5	
10	Number root tips	medium	5	
11	Protrusion lenticells	medium	5	
12	Length lateral shoots	medium	5	
Plant				
13	Height	short to medium	4	
14	Type	leaf-type	3	
15	Growth habit	semi-erect to spreading	6	
Stem				
16	Thickness main stem	medium	5	
17	Extension anthocyanin coloration	weak to medium	4	
Leaf				
18	Size	large	7	
19	Silhouette	closed to medium	4	

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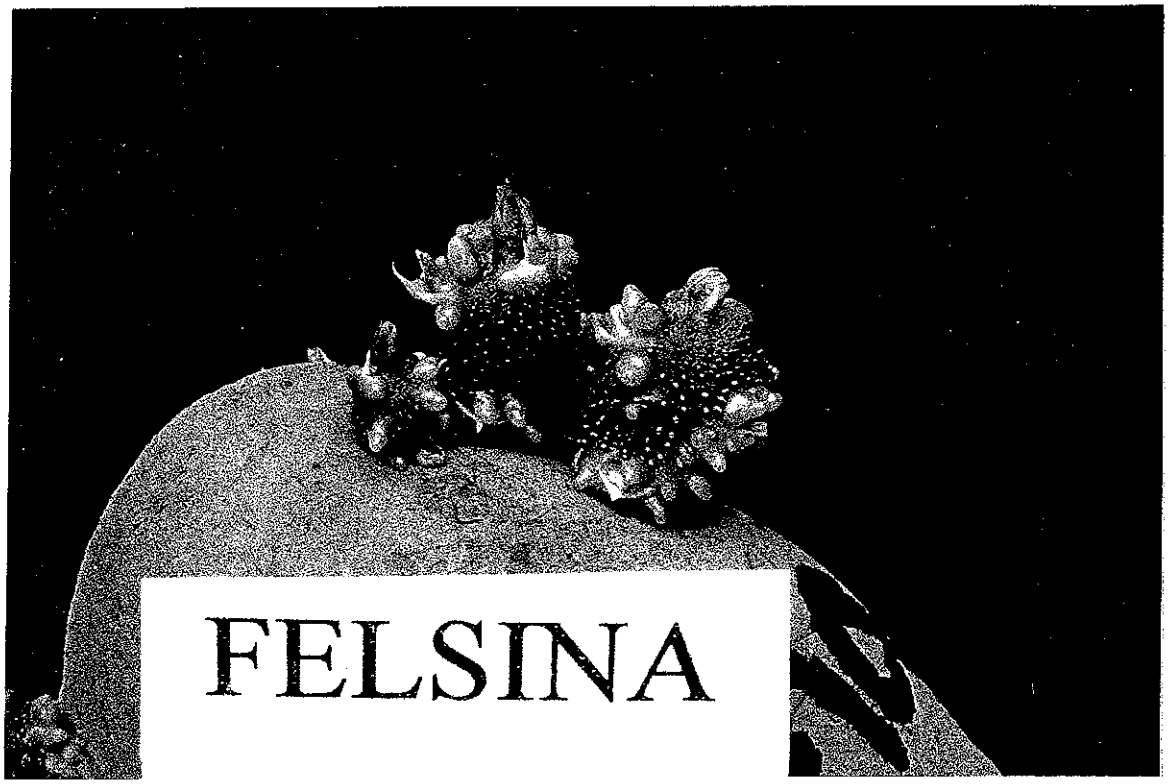

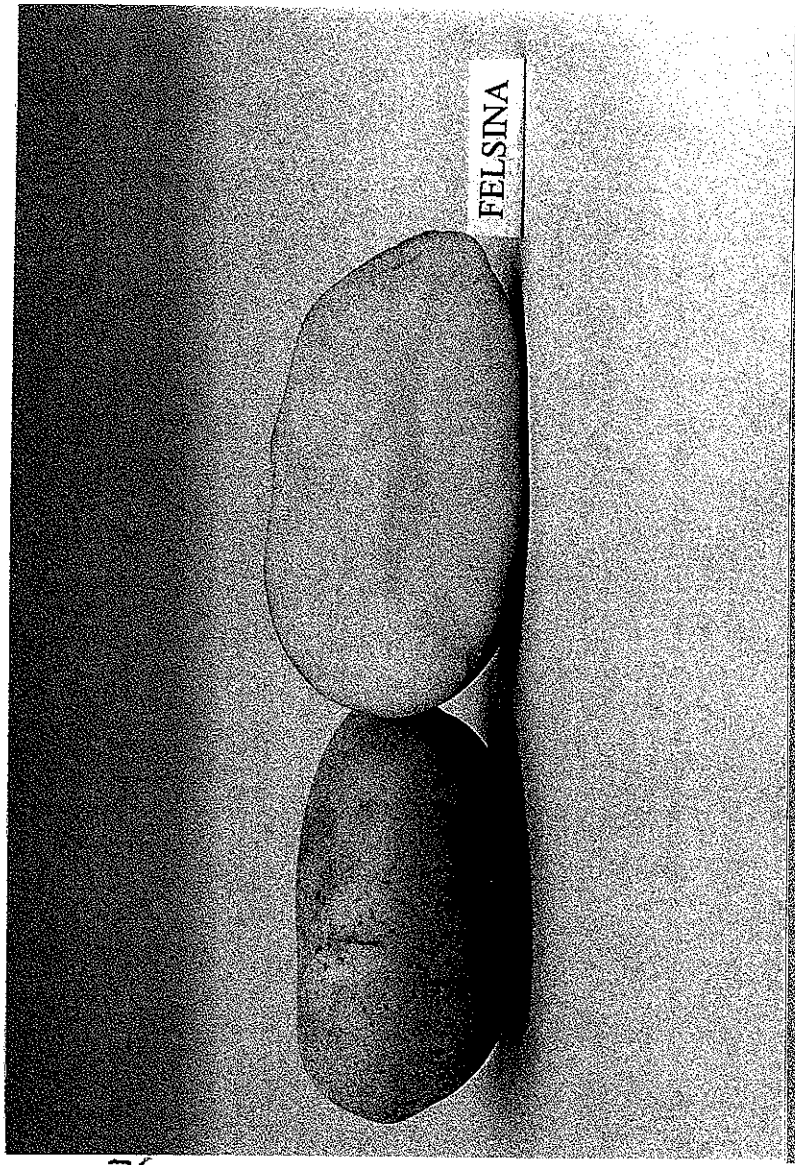

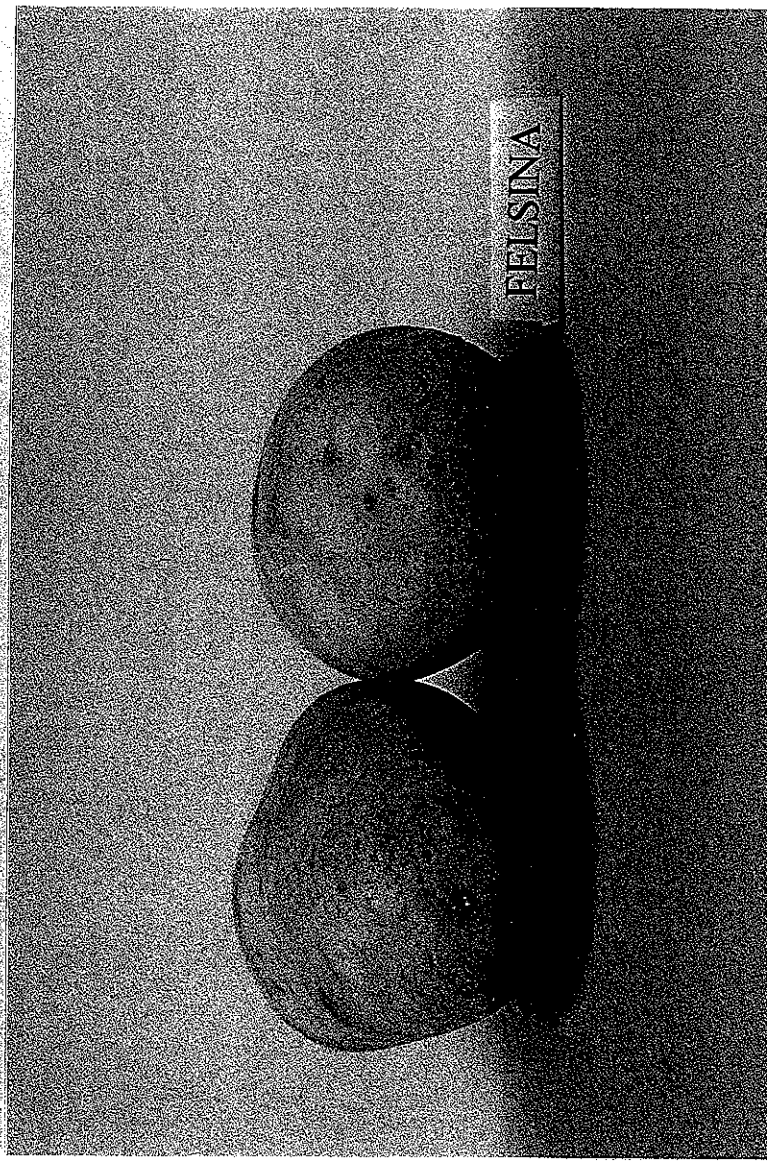

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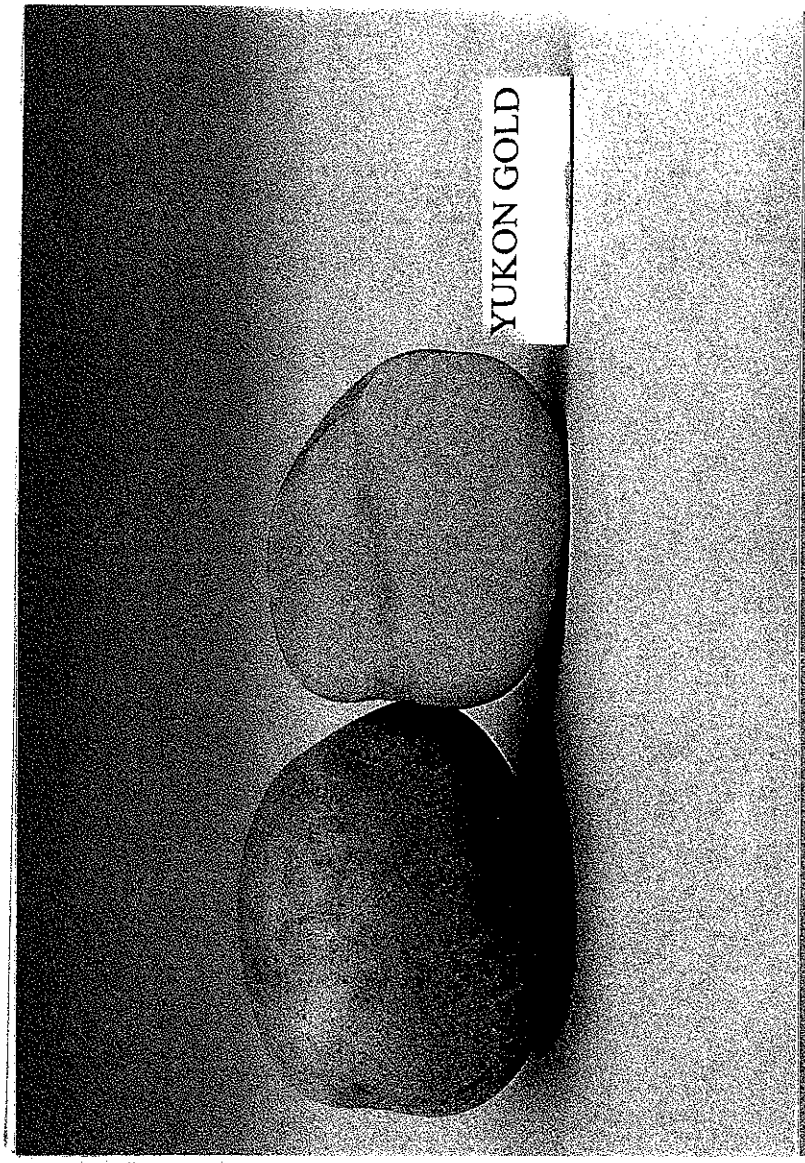

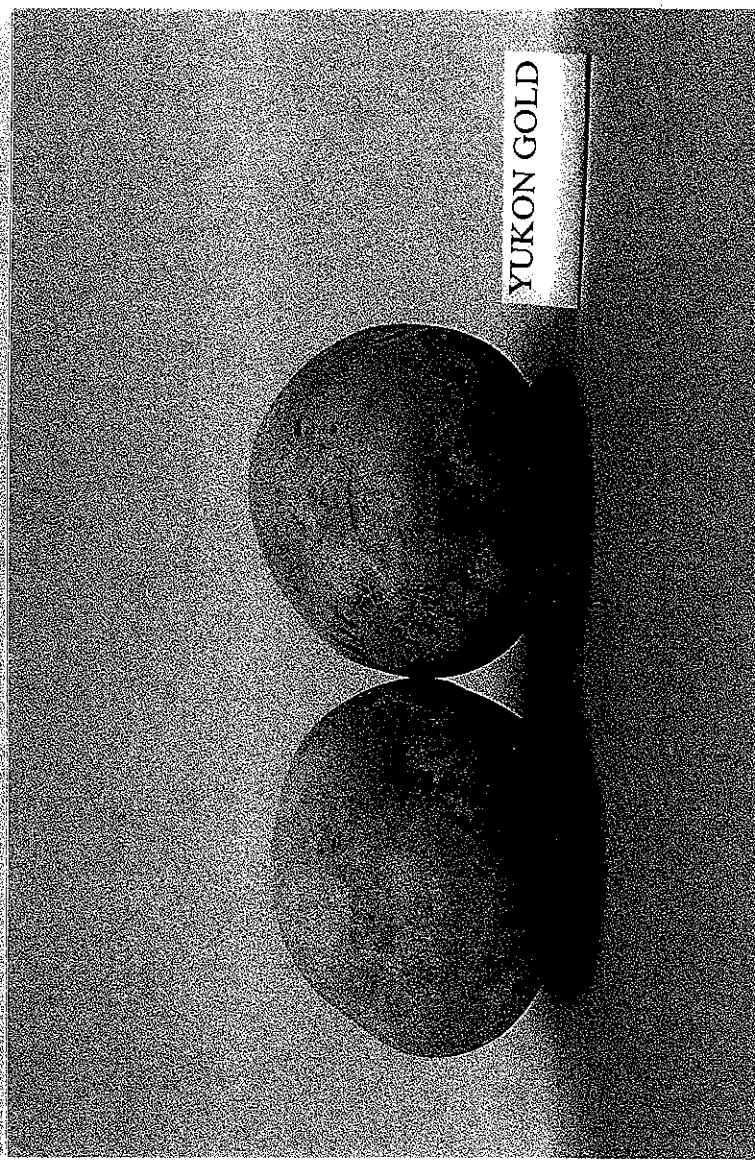

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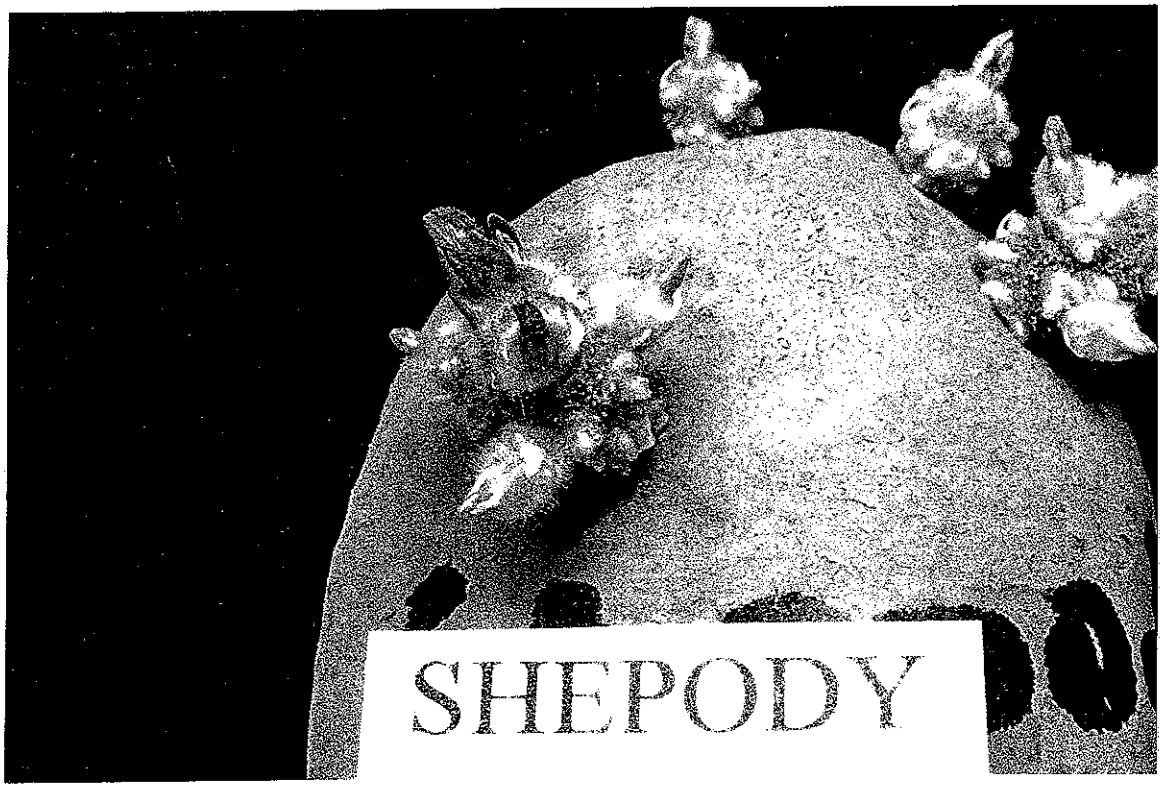

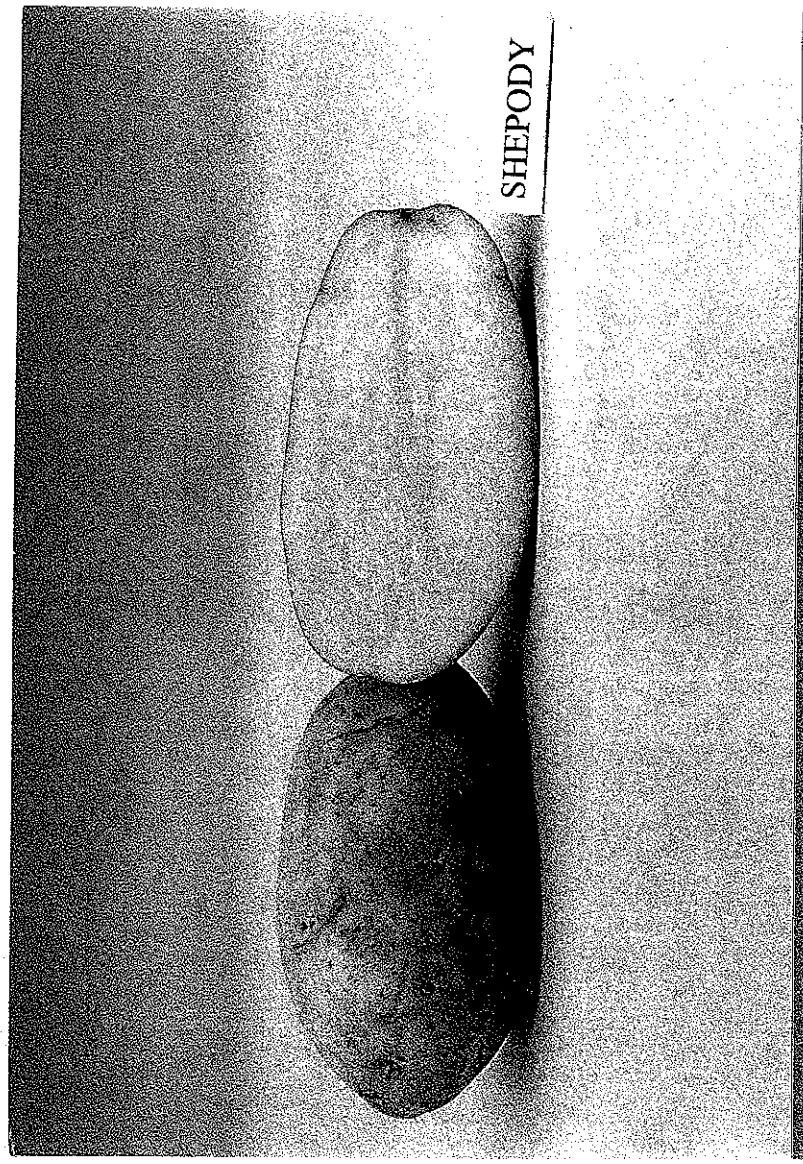

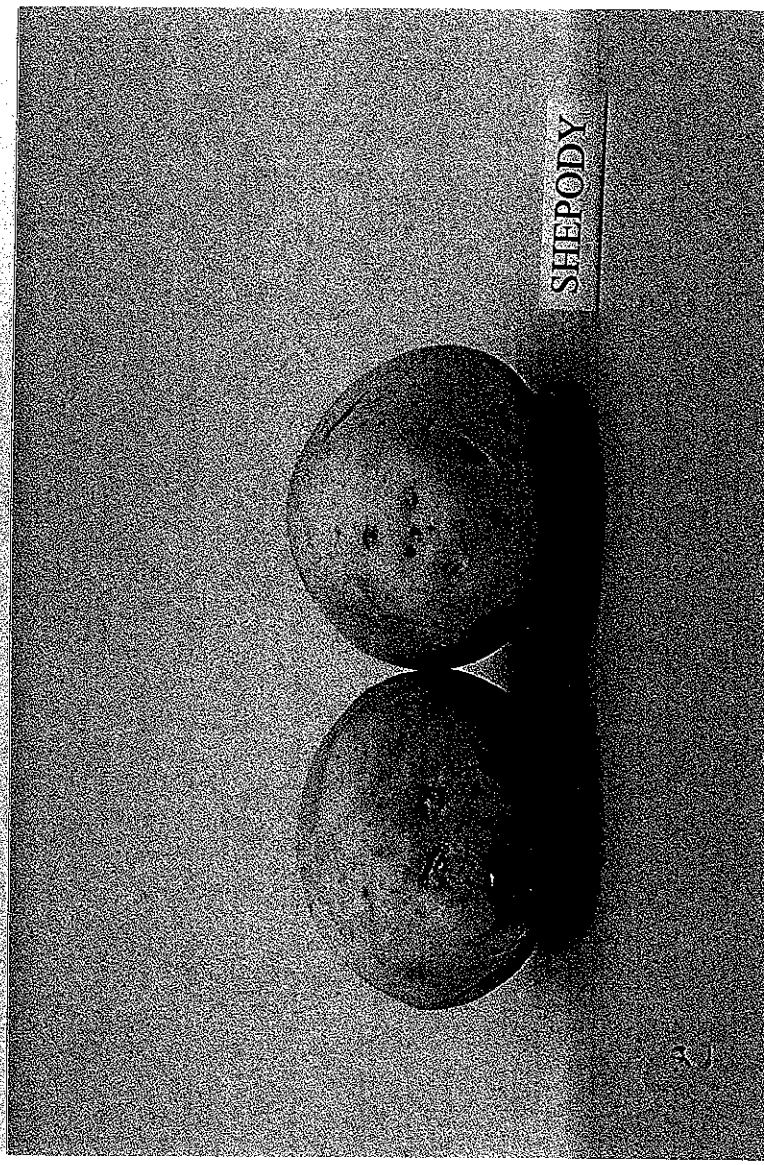

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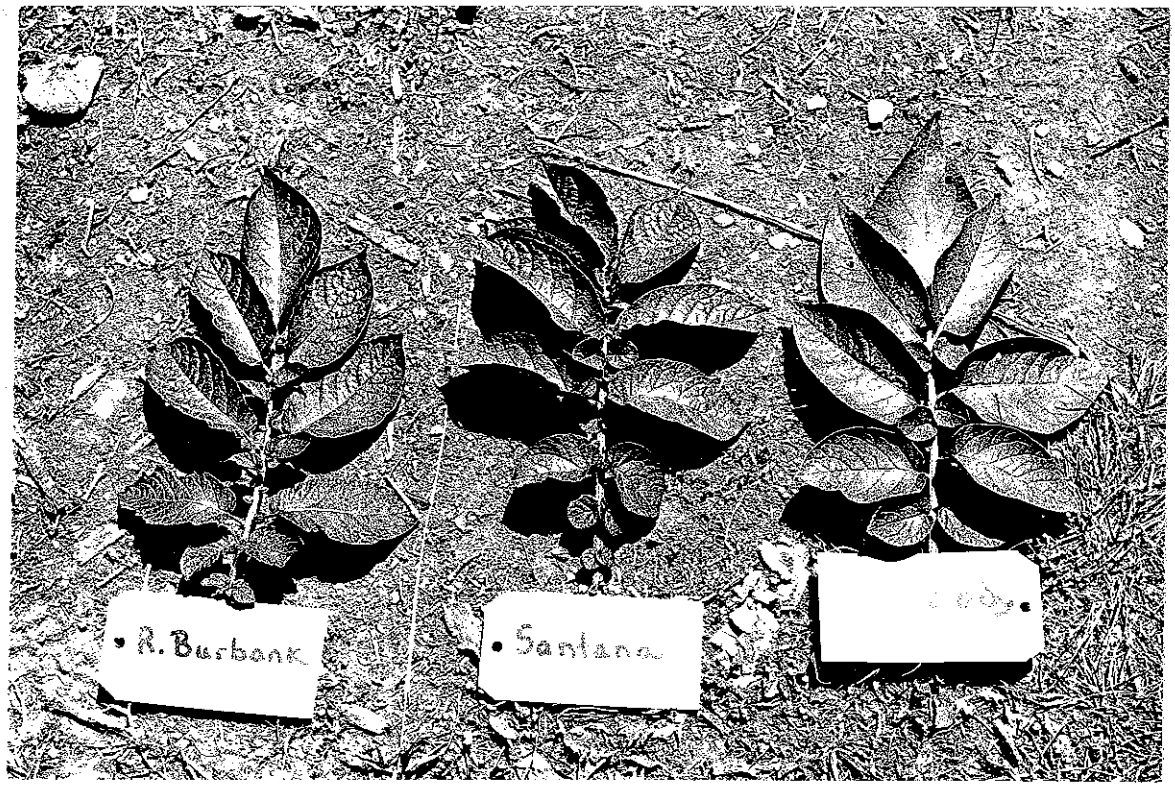

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Application is required in order to determine if a plant variety protect certificate is to be issued (7 U.S.C. 2421). Information is held confiden until certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

12/11/01 JMP per letter

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
HZPC HOLLAND B.V.	-	FELSINA

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*	5. TELEPHONE *(include area code)*	6. FAX *(include area code)*
P.O. Box 88 NL – 8500 AB Joure The Netherlands	7. PVPO NUMBER 09700114	

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

see annex (question 11)

9. Is the applicant *(individual or company)* a U.S. national or U.S. based company? ☐ YES ☒ NO
If no, give name of country _____

10. Is the applicant the original owner? ☐ YES ☒ NO *If no, please answer the following:*

a. If 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* The Netherlands

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?

☐ YES ☒ NO *If no, give name of country* The Netherlands

11. Additional explanation on ownership *(If needed, use reverse for extra space):*

The variety for which Plant Variety Protection is hereby sought was developed by Mr. S. Brunia, Morenelaan 6, 8317 AX KRAGGENBURG, The Netherlands Mr. S. Brunia is a private breeder, associated with Hettema B.V., Randweg 25, P.O. Box 99, 8300 AB EMMELOORD, The Netherlands.
By agreement between Mr. S. Brunia and Hettema B.V., Hettema B.V. has the exclusive, world-wide representation for the potato variety FELSINA.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of 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 natio 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 final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid O control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this informa collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathe and maintaining the data needed, and completing and reviewing the collection of information.

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HZPC

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ABN AMRO 45 00 94 502
Friesland Bank 29 83 00 036
VAT NL807807928B01
Trade register 01084958

ASSIGNMENT OF LEGAL REPRESENTATIVE

I, S. Brunia
Morenelaan 6
8317 AX KRAGGENBURG
The Netherlands

do hereby assign, effective the 15 day of January, 2001,

to, HZPC HOLLAND B.V.
P.O. Box 88
8500 AB JOURE
The Netherlands

the full and exclusive right, title and interest in the United State of America and to the Plant Variety Protection Certificate Number 9900114 and 9600401 for the potato variety entitled FELSINA and MORENE, to be held and enjoyed by the said assignee to the full end of the term for which the Plant Variety Protection are granted, as fully and entirely as the same could have been held and enjoyed by me if this assignment had not been made.

Signed at Kraggenburg, The Netherlands

this ---15--- day of ---January---, 2001

Witness ----------

Signed at Joure, The Netherlands

this ---31--- day of ---January---, 2001

Witness ----------

HZPC Holland B.V. • P.O. BOX 88, 8500 AB Joure, The Netherlands • HZPC

Appendix A
Assignment of Legal Representative (PVP)

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

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)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	TEMPORARY OR EXPERIMENTAL DESIGNATION
HZPC HOLLAND B.V.	P.O. BOX 88 NL - 8500 AB JOURE	BRU.80-37-125
		VARIETY NAME FELSINA
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	FOR OFFICIAL USE ONLY
HZPC HOLLAND B.V.	P.O. BOX 88 NL - 8500 AB JOURE	PVPO NUMBER 09700114

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.

HZPC Holland B.V. HZPC P.O. BOX 88, 8500 AB Joure, The Netherlands

Signature

23 FEB. 2006

Date

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