200100104

No.

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

CERTIFICA SAS

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 [illegible]GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR [illegible]RTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE [illegible] PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT [illegible] BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

POTATO

'JULIETTE'

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-seventh day of September, in the year two thousand and seven.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[illegible] Agriculture

200100104

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - 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 A 1974 (5 U.S.C. 552a).

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

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
GERMICOPA SAS
LMC per correspondence June 15, 2007

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
G86TT278.3

3. VARIETY NAME
JULIETTE

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Allée Loeiz Herrieu, 1
29334 Quimper Cedex
FRANCE

5. TELEPHONE *(include area code)*
+33 2 98 10 01 00

6. FAX *(include area code)*
+33 2 98 10 01 20

FOR OFFICIAL USE ONLY
PVPO NUMBER: 200100104
FILING DATE: 02/08/01
FEES RECEIVED
FILING AND EXAMINATION FEE: $ 2,460.00
DATE: 02-08-2001
CERTIFICATION FEE: $ 768.00 + Tech 9250
DATE: 08-06-2007

7. GENUS AND SPECIES NAME
Solanum tuberosum

8. FAMILY NAME *(Botanical)*
tuberosum

9. CROP KIND NAME *(Common name)*
POTATO

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.) (Common name)*
-

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
FRANCE

12. DATE OF INCORPORATION
June 29, 2001

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
LMC per correspondence May 15, 2007
Brian C. Cholewa
Quarles & Brady LLP
33 East main Street, Suit 900
P.O. Box 2113
Madison WI 53701-2113

14. TELEPHONE *(include area code)*
608/251-5000

15. FAX *(include area code)*
608/251-9166
bcholewa@quarles.com

LMC per correspondence May 15, 2007

16. 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 the Variety
d. ☒ Exhibit D. Additional Description of the Variety (AFLP markers + UPOV variety description)
e. ☐ Exhibit E. Statement of the Basis of the Applicant'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 a public repository)*
g. ☐ Filing and Examination Fee ($2,460), made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes," answer items 18 and 19 below)* ☒ NO *(If "no," go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ YES *(If "yes," give names of countries and dates)* ☐ NO

FRANCE, 02/10/1997

21. The applicant(s) declare that a viable sample of basic seed of the variety will be 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 applicant(s) is(are) the owner(s) 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 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*

NAME *(Please print or type)*
NICHOLAS J. SEAY

CAPACITY OR TITLE
ATTORNEY FOR APPLICANT.

DATE
Feb 6, 2001

SIGNATURE OF APPLICANT *(Owner(s))*

NAME *(Please print or type)*

CAPACITY OR TITLE

DATE

SD-470 (04 86) *(Previous editions are to be destroyed)* *(See reverse for instructions and information collection burden statem*

INSTRUCTIONS

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

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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.

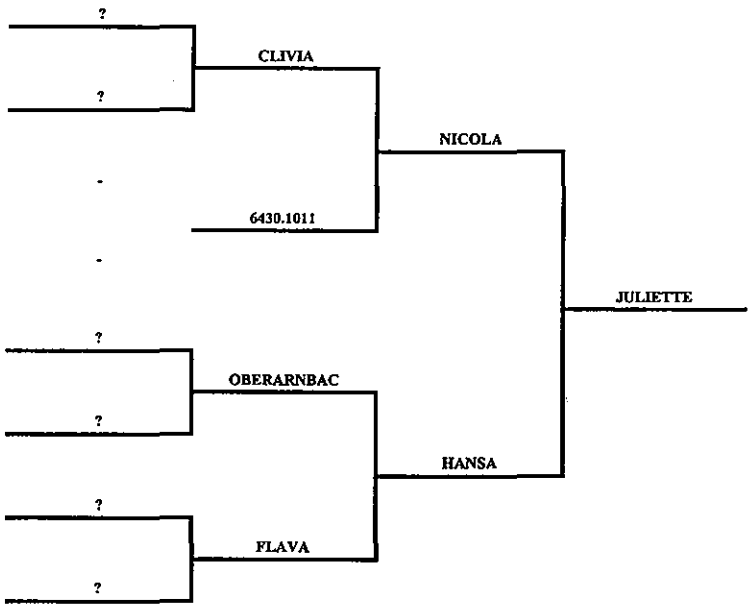
Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments 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.

JULIETTE

Origin: FRANCE - Brittany - Châteauneuf-du-Faou (Finistère)

Breeding: crossing NICOLA X HANSA (1985)

NICOLA and HANSA are german variety;.public varieties in France.



seed sowing : may 1986.

selection criteria : on a regular basis, yield is one of the main trait. Yield is assessed according to the maturity group over many locations around Western Europe for a 4 year-period of time by theapplicant (as part of the breeding work) then over 10 to 15 locations in France for a 2 year-period when the official testing for registration is performed by CTPS (Ministry of Agriculture -France). Also, a number of quality traits are evaluated both by the applicant and CTPS, including cooking quality, mechanical damage, disease resistances (late blight, common scab, wart disease, potato cyst nematod) and physiological disorder (hallow heart, internal rust).
JULIETTE has been selected and registered in Europe as a firm flesh potato having high standards for the cooking quality. Main reason for selection is the unique combination of its long tuber shape, deep yellow skin and flesh color, high level of resistances to silver scab, netted scab, leaf and tuber late blight and low susceptibility to pitted scab and powdery scab. It is resistant to golden nematod. JULIETTE is not suitable for processing. It is rather resistant to hollow heart but susceptible to brown spot. Yield is above control of the same maturity group (105% of BF 15) and below to the leading variety Charlotte (95%). Dormancy is long and makes JULIETTE an easy variety to store without sprout inhibitor. On the other hand, it is susceptible to mechanical damage (bruising).

application for registration : France, 10/24/1994.

registration: France, 05/17/97.

Maintenance : clonal reproduction, France, GERMICOPA

Stability & Uniformity : - official testing : 2 years : 1995-1996 (see UPOV variety description).
- breeder's experience : no variant, no off-type reported yet.

Differences from NICOLA and HANSA :
JULIETTE is easily distinguished from both NICOLA and HANSA by its longer tuber shape and smaller tuber size. Also, the disease resistance set (late blight, scabs, nematod) is unique to JULIETTE.

Informations for Registrations on PBR and National List

Family name (botanical): *Solanum tuberosum* – Potato

Proposed name: JULIETTE

Breeder's reference : G86TT278.3

Applications in other countries:

	Application Country - Date	Ref.N° of application	Stage	Ref.N° of registration	End of PBR	Variety name or Breeder's reference
Plant Breeder's Rights :	EU - 13/10/97	97/1128	D	EU3009	31/12/2028	JULIETTE JULIETTE
National List :	F - 24/10/94 GB - 02/11/96	68814 4/617	D D	68814 AFP4/617		JULIETTE JULIETTE

Priority date : NO

Country, date and variety name of the first sale in UPOV's membership :
F – February 10,1997 (JULIETTE)

Examens techniques à des fins officielles : F, CH, D, GB, NL
DUS experiments (Distinctivness, Uniformity et Stability) in Holland (Wageningen) in 1995 et 1996.

Maintenance **methodology :** clonal reproduction (field+in vitro)
location: Châteauneuf-du-Faôu (France),
maintainor : Germicopa SA

Breeding :

G.M.O ? : NO

Origin **location** : France

genetics : NICOLA x HANSA (S.tuberosum X S.tuberosum)

year of crossing :1985

screening : 1986 - 1994

sowing : mai 1986

JULIETTE has been selected accordlingly to the technical traits evaluated and reported on french national catalog, category « chair ferme » ("firm flesh" or "salad"). Tuber shape is long oval, tuber size is medium to small and uniform, with shallow eyes, a yellow skin and a yellow yellow flesh color.

Yield and cooking quality, as defined by the cooking group A-AB (EAPR), no after cooking discoloration and a good taste have been selected after 6 years of multilocal field trials around France.

Pest and disease resistances (late blight, scabs, roting, nematods) were being evaluated in lab tests or field tests.

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Exhibit B

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

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

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).

Eg. Terminal leaflet tip shape *Eg. Corolla inner Color* *Eg. NumberEye/Tuber*	*Cuspitate* *Violet (85A)* *15 +/- 2 (N=100)*	*Obtuse* *Red Purple (74B)* *30 +/- 4 (N=100)*	*photograph attached* *Royal Horticultural Society Colour Chart statistics attached*
1. Qualitative traits:	Applicant's New Variety Juliette	1st Comparison Variety Charlotte	Location of Evidence
2. Color traits:	corolla inner surface color is white; 5RP is 5/8 to 5/10, Munsell; has a weak anthocyanin coloration of the calyx.	corolla inner surface color is red-violet; has no anthocyanin coloration of the calyx.	
3. Quantitative traits:	has mid-season maturity, 115 days after planting; stem wings are absent; produces less pollen than Charlotte.	has early maturing, 105 days after planting; stem wings are weak.	
4. Other:	carries the H1 gene for resistance to globoderra rostochiensis (Golden nematode) and is resistant to pathotype RO1-4.	does not carry the H1 gene and is susceptible to all pathotypes.	

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

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EXHIBIT B – STATEMENT OF DISTINCTNESS

JULIETTE

The variety JULIETTE is most similar to the variety CHARLOTTE; however, JULIETTE differs from CHARLOTTE :

- in maturity class : Juliette and Charlotte were evaluated for maturity class during 2 years in different locations, by CTPS which performs official tests for variety registration in France, they were compared to standards (see annexe: extract from "*1995-2001, Bulletin des Variétés, Pomme de terre*" edited by GEVES). Juliette has a score 5-6 equal to an average of 115 days after planting (110 to 130 days). Charlotte has a score 7 equal to an average of 105 days after planting (90 to 120 days). So variety JULIETTE is a mid-season maturity: 115 days after planting vs. variety CHARLOTTE is an early maturity : 105 days after planting.

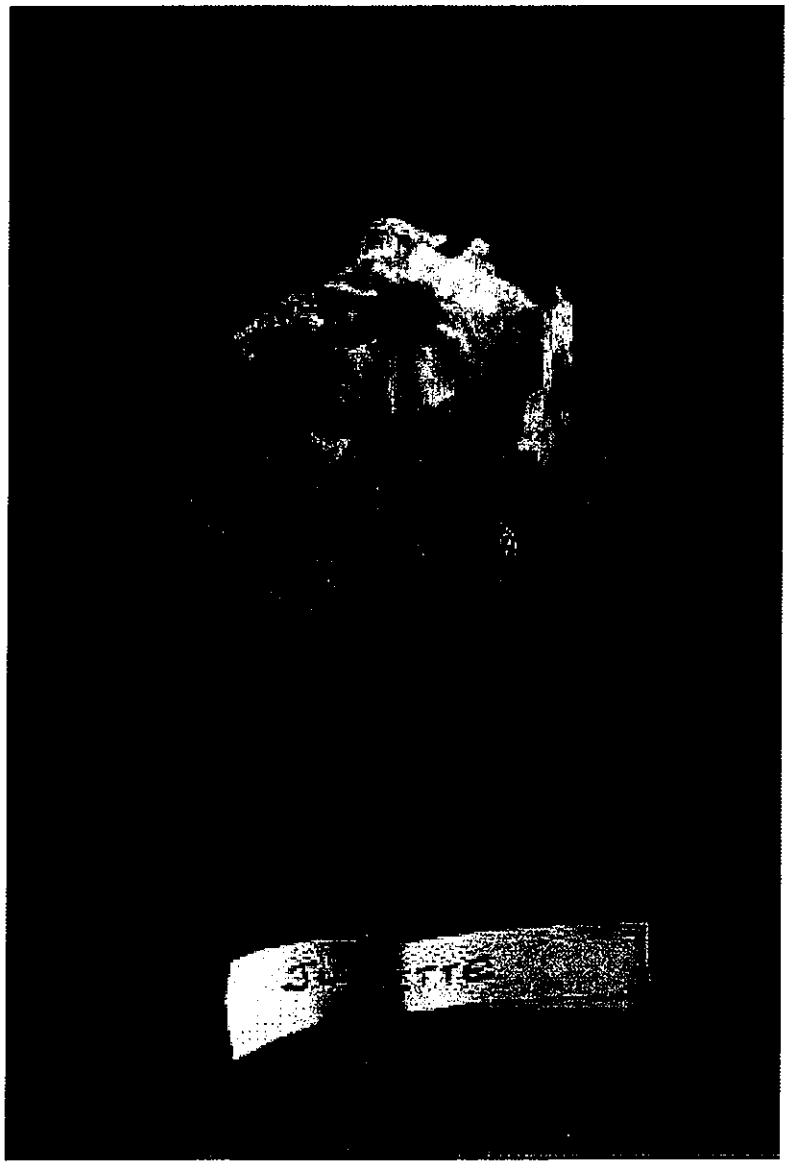
- in stem wings : absent for Juliette vs weak for CHARLOTTE.

- in corolla inner surface color : JULIETTE is white and CHARLOTTE is red-violet; 5RP 4/1 vs. 5RP 5/8 to 5/10, Munsell. LMC per correspondence May 15, 2007

In Exhibit C, other differences are documented between the two varieties. Compared to CHARLOTTE, JULIETTE has a weak anthocyanin coloration of the calyx and CHARLOTTE has none. JULIETTE produces less pollen than CHARLOTTE.

The variety JULIETTE carries the H1 gene for resistance to *Globoderra rostochiensis* (Golden nematod) and is resistant to pathotype RO1-4, whereas CHARLOTTE does not have the H1 gene and is susceptible to all pathotypes.

"See AFLPs Analysis in Exhibit D"



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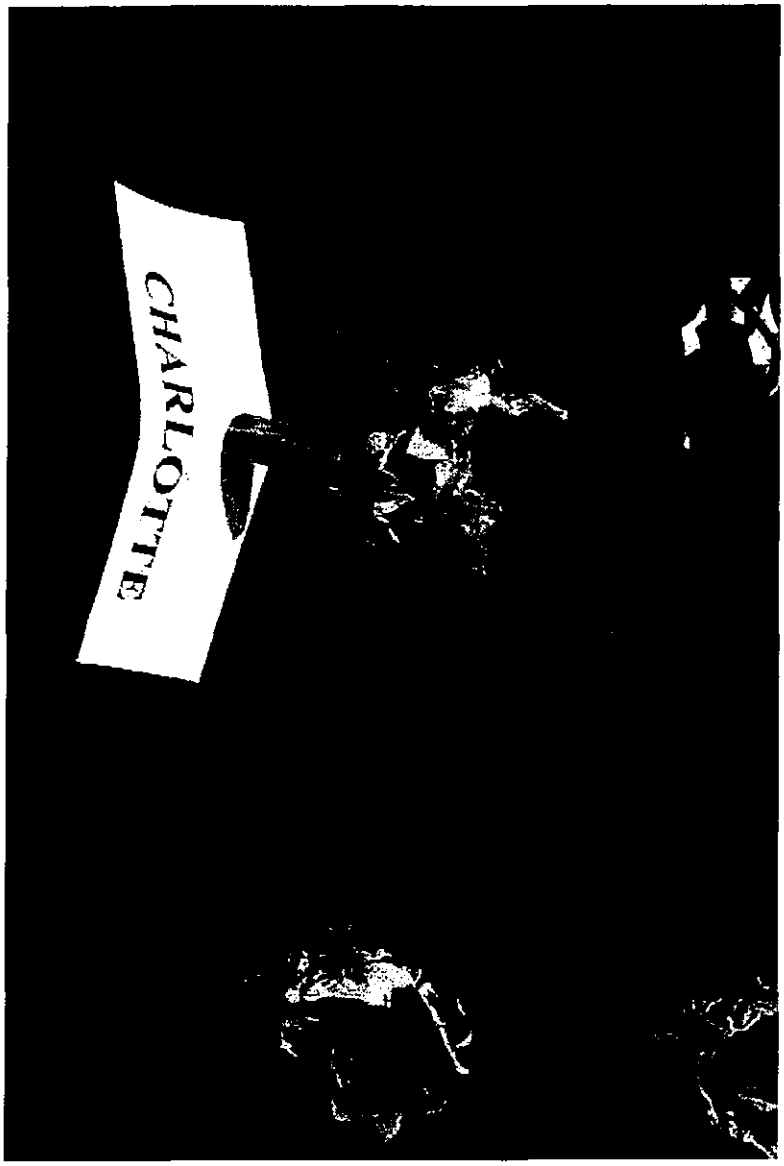

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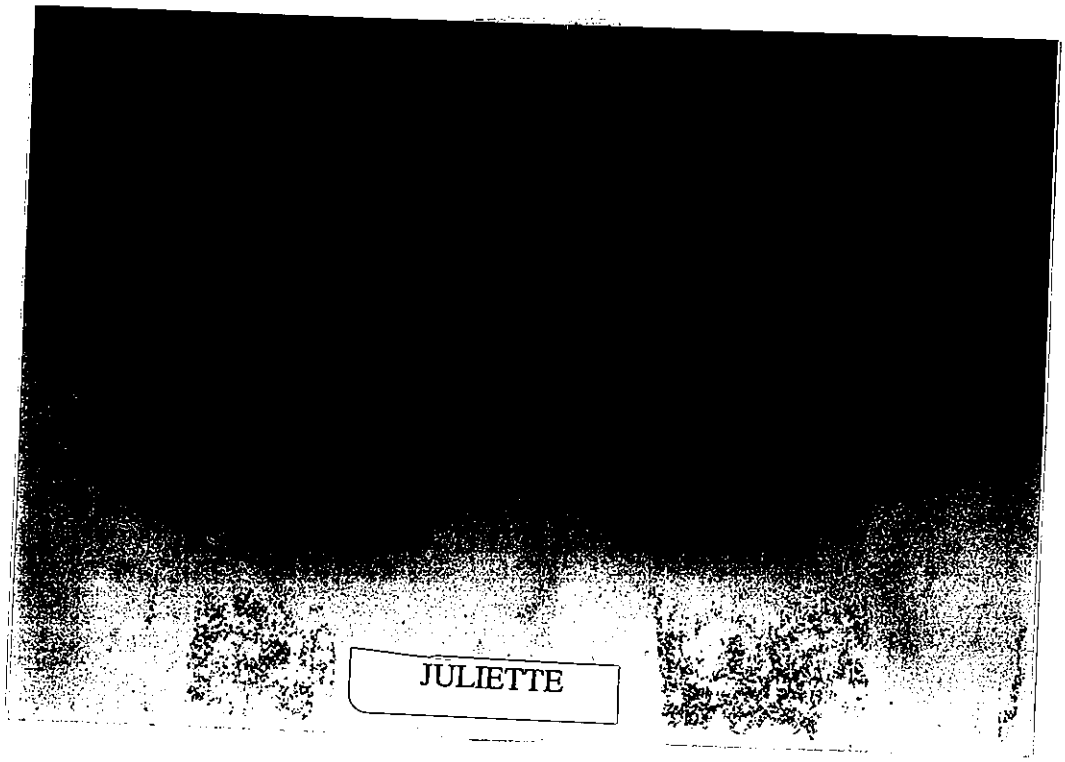

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UPOV variety description

1. Reference number of reporting authority : ARD 1241
2. Reference number of requesting authority :
3. Breeder's reference :
4. Applicant :

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5. Botanical name of taxon : Solanum tuberosum L.
6. Common name of taxon : Potato
7. Variety denomination :
8. Document number and date UPOV guidelines : TG/23/5 d.d. 21-11-1986
9. Document number and/or date of national test guidelines :
10. Testing authority : Raad v/h Kwekersrecht, Wageningen, NL
11. Testing station(s) and place(s) : CPRO-DLO, Wageningen
12. Period of testing : 1995/1996
13. Date and place of issue of document : 08-11-1996, Wageningen

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14. Group: (if characteristics of number 15 are used for grouping, they are marked with a "G" in that number).

UPOV No.	Characteristics	States of expression	Note	Remarks
3.	Lightsprout: anthocyanin coloration of base	red-violet	1	
38.	Inflorescence: flower corolla: color of inner side	white	1	
47.	Tuber: color of skin	yellow	1	

OFFICE COMMUNAUTAIRE DES VARIETES VEGETALES – COMMUNITY PLANT VARIETY OFFICE

Reference number of reporting authority: ARD 1241

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

UPOV No.	Characteristics	States of expression	Note	Remarks
1.	Lightsprout: size	medium	5	
2.	Lightsprout: shape	conical	3	
3.G	Lightsprout: anthocyanin coloration of base	red-violet	1	
4.	Lightsprout: intensity of anthocyanin coloration of base	strong	7	
5.	Lightsprout: pubescen of base	strong	7	
6.	Lightsprout: size of tip	medium	5	
7.	Lightsprout: habit of tip	closed to medium	4	
8.	Lightsprout: intensity of anthocyanin coloration of tip	weak	3	
9.	Lightsprout: pubescens of tip	medium	5	
10.	Lightsprout: number of root tips	medium to many	6	
11.	Lightsprout: protrusion of lenticels	weak to medium	4	
12.	Lightsprout: length of lateral shoots	short to medium	4	
13.	Plant: height	medium	5	
14.	Plant: type	intermediate type	2	
15.	Plant: growth habit	erect to semi erect	4	
16.	Stem: thickness of main stem	medium	5	
17.	Stem: extension of anthocyanin coloration	weak	3	
18.	Leaf: size	medium to large	6	

OFFICE COMMUNAUTAIRE DES VARIÉ
COMMUNITY PLANT VARIE

Reference number of reporting authority: ARD 1241

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

UPOV No.	Characteristics	States of expression	Note	Remarks
19.	Leaf: silhouette	medium to open	6	
20.	Leaf: intensity of green color	medium	5	
21.	Leaf: extension of anthocyanin coloration of midrib	absent or very weak	1	
22.	Leaflet: size	medium	5	
23.	Leaflet: width	medium	5	
24.	Leaflet: frequency of coalescence	low	3	
25.	Leaflet: waviness of margin	weak	3	
26.	Leaflet: depth of veins	shallow to medium	4	
27.	Leaflet: anthocyanin pigmentation of blad of young leaflets at apical rosette	absent	1	
28.	Leaflet: glossiness of the upper side	medium	5	
29.	Leaflet: (midrib): frequency of secondary leaflets	medium	5	
30.	Leaflet: frequency of secondary leaflets on terminal leaflet	medium	5	
31.	Leaflet: frequency of secondary leaflets on lateral leaflet	low to medium	4	
32.	Leaflet: size of secondary leaflet on lateral leaflet	small to medium	4	
33.	Inflorescence: size	medium	5	
34.	Inflorescence: anthocyanin coloration of peduncle	very weak to weak	2	
35.	Inflorescence: frequency of flowers	medium	5	

OFFICE COMMUNAUTAIRE DES VARIETES VEGETALES — COMMUNITY PLANT VARIETY OFFICE

Reference number of reporting authority: ARD 1241

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

UPOV No.	Characteristics	States of expression	Note	Remarks
36.	Inflorescence: anthocyanin coloration of bud	weak	3	
37.	Inflorescence: flower corolla: size	medium	5	
38.G	Inflorescence: flower corolla: color of inner side	white	1	
39.	Inflorescence: corolla: intensity of anthocyanin coloration of inner side in colored flower	-	-	
40.	Inflorescence: corolla: anthocyanin coloration of outer side in white flower	absent	1	
41.	Inflorescence: corolla: size of white tips in colored flower	-	-	
42.	Inflorescence: frequency of fruits	very few to few	2	
43.	Plant: time of maturity	medium	5	
44.	Tuber: shape	long	5	
45.	Tuber: depth of eyes	shallow	3	
46.	Tuber: smoothness of skin	medium	5	
47.G	Tuber: color of skin	yellow	1	
48.	Tuber: color of base of eye	yellow	1	
49.	Tuber: color of flesh	yellow	4	
50.	Tuber: anthocyanin coloration of skin in reaction to light (Yellow skinned varieties)	weak to medium	4	

OFFICE COMMUNAUTAIRE DES VARIETES VEGETALES — COMMUNITY PLANT VARIETY OFFICE 1

Reference number of reporting authority: ARD 1241

16. Similar varieties and differences in relation to those varieties

Denomination of similar variety	Characteristics in which the similar variety is different	State of expression of similar variety	State of expression of candidate variety
Sigma	Lightsprout: intensity of anthocyanin coloration of base	2	7

17. Additional information

a) Additional data :

b) Remarks :

OFFICE COMMUNAUTAIRE DES VARIETES VEGETALES
COMMUNITY PLANT VARIETY OFFICE

200100104

NAME OF APPLICANT(S)	FOR OFFICIAL USE ONLY
GERMICOPA SAS	PVPO NUMBER 200100104
ADDRESS (*Street and No. or R.F.D. No., City, State, and Zip Code*) Allée Loeiz Herrieu, 1 29334 Quimper Cedex FRANCE	VARIETY (V) NAME JULIETTE TEMPORARY OR EXPERIMENTAL DESIGNATION G86TT278.3

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

Reference Variety 1 (R1)	Reference Variety 2 (R2)	Reference Variety 3 (R3)	Reference Variety 4 (R4)
CHARLOTTE	KENNEBEC	RUSSET BURBANK	SNOWDEN

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
1	1	2	5	3

2. PLANT CHARACTERISTICS:

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

V	R1	R2	R3	R4
5	5	5	7	5

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

V	R1	R2	R3	R4
1	2	3	3	2

MATURITY: Days after planting (DAP) at vine senescence

V	R1	R2	R3	R4
115	105	110	130	116

PLANTING DATE:

V	R1	R2	R3	R4
5/15/00	5/15/00	5/15/00	5/15/00	5/15/00

REGION/AREA:

V	R1	R2	R3	R4
France/ Bretagne	France/ Bretagne	France/ Bretagne	France/ Bretagne	France/ Bretagne

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
3	2	2	4	3

3. 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
1	1	1	3	1

STEM WINGS: *(See figure 12)*
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	R1	R2	R3	R4
1	3	5	3	3

4. LEAF CHARACTERISTICS:

LEAF COLOR: *Observe fully developed leaves located on middle $^1/_3$ of plant*
1 = Yellowish-green; 2 = Olive-green; 3 = Medium green; 4 = Dark green; 5 = Grey-green; 6 = Other_____

V	R1	R2	R3	R4
4	3	4	2	1

LEAF COLOR: *Observe fully developed leaves located on middle $^1/_3$ of plant and circle the appropriate color chart.*
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
7.5GY 5/4 to 5/6	7.5GY 5/4 to 5/6	7.5GY 4/4 to 4/6	7.5GY 4/4 to 4/6	7.5GY 5/4 to 5/6

LEAF PUBESCENCE DENSITY:
1 = Absent; 2 = Sparse; 3 = Medium; 4 = Thick; 5 = Heavy

V	R1	R2	R3	R4
2	2	2	2	2

LEAF PUBESCENCE LENGTH:
1 = None; 2 = Short; 3 = Medium; 4 = Long; 5 = Very long

V	R1	R2	R3	R4
2	2	2	2	2

(Note: Descriptor #19 can be used to describe the type and length of the glandular trichomes observed.)

LEAF SILHOUETTE: *(See figure 2)*
1 = Closed; 3 = Medium; 5 = Open

V	R1	R2	R3	R4
3	5	5	5	3

PETIOLES ANTHOCYANIN C[illegible]RATION:
1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	R1	R2	R3	R4
1	1	1	1	1

LEAF STIPULES SIZE: *(See figure 13)*
1 = Absent; 3 = Small; 5 = Medium; 7 = Large

V	R1	R2	R3	R4
-	-	-	-	-

TERMINAL LEAFLET SHAPE: *(See figure 3 & 11)*
1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical;
6= Obovate; 7 = Oblong; 8 = Other_____

V	R1	R2	R3	R4
2	2	3	5	2

TERMINAL LEAFLET TIP SHAPE: *(See figure 4 & 11)*
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other_____

V	R1	R2	R3	R4
3	3	1	1	3

TERMINAL LEAFLET BASE SHAPE: *(See figure 5 & 11)*
1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other_____

V	R1	R2	R3	R4
2	3	3	3	3

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

V	R1	R2	R3	R4
2	2	2	2	4

NUMBER OF PRIMARY LEAFLET PAIRS: *(See figure 11)*

AVERAGE:

V	R1	R2	R3	R4
3	4	3	3	3

RANGE:

V	R1	R2	R3	R4
3to 4	3 to 4	2to 3	2 to 3	2 to 3

PRIMARY LEAFLET TIP SHAPE: *(See figure 4 & 11)*
1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other_____

V	R1	R2	R3	R4
3	3	1	3	1

PRIMARY LEAFLET SHAPE: *(See figure 3 & 11)*
1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical;
6= Obovate; 7 = Oblong; 8 = Other_____

V	R1	R2	R3	R4
2	1	4	1	2

PRIMARY LEAFLET BASE SHAPE: *(See figure 5 & 11)*
1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other_____

V	R1	R2	R3	R4
3	3	4	4	3

NUMBER OF SECONDARY AND TERTIARY LEAFLET PAIRS: *(See figure 11)*

AVERAGE:

V	R1	R2	R3	R4
4	10	3	3	3

RANGE:

V	R1	R2	R3	R4
3 to 5	8 to 12	3 to 4	2 to 4	2 to 4

5. INFLORESCENCE CHARACTERISTICS:

NUMBER OF INFLORESCENCE / PLANT:

AVERAGE:

V	R1	R2	R3	R4
4	4	2	8	

RANGE:

V	R1	R2	R3	R4
1 to 6	3 to 8	2 to 3	6 to 12	- to -

NUMBER OF FLORETS / INFLORESCENCE:

AVERAGE:

V	R1	R2	R3	R4
4	5	2	10	

RANGE:

V	R1	R2	R3	R4
3 to 6	4 to 10	1 to 5	8 to 12	- to -

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

V	R1	R2	R3	R4
white	5RP 5/8 to 5/10	white	white	white

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

V	R1	R2	R3	R4
5RP 9/8 white	5RP 5/8 to 5/10 red-violet	white	white	white

Per new ExhB March 2, 2007
LMC
6-22-07

COROLLA SHAPE: *(See figure 6)*
1 = Very rotate; 2 = Rotate; 3 = Pentagonal; 4 = Semi-stellate; 5 = Stellate

V	R1	R2	R3	R4
3	3	4	5	-

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

V	R1	R2	R3	R4
3	1	1	1	-

ANTHER COLOR: *Measure when newly opened flower is fully expanded and circle the appropriate color chart*
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
-	-	-	-	-

ANTHER SHAPE: *(See figure 7)*
1 = Broad cone; 2 = Narrow cone; 3 = Pear shape cone; 4 = Loose; 5 = Other_____

V	R1	R2	R3	R4
2	1	3	4	-

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

V	R1	R2	R3	R4
3	5	5	1	-

STIGMA SHAPE: *(See figure 8)*
1 = Capitate; 2 = Clavate; 3 = Bi-lobed

V	R1	R2	R3	R4
1	1	1	1	-

STIGMA COLOR: *Circle the appropriate color chart*
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
7.5GY 7/4 to 7/6	7.5GY 7/4 to7/6	7.5GY 7/4 to 7/6	7.5GY 7/4 to 7/6	7.5GY 7/4 to 7/6

BERRY PRODUCTION: *Under field conditions*
1 = None; 3 = Low; 5 = Moderate; 7 = Heavy; 9 = Very heavy

V	R1	R2	R3	R4
3	3	1	3	-

5. 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
3	3	5	6	5

GIVE COLOR CHART VALUE AND CIRCLE THE APPROPRIATE COLOR CHART
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
2.5Y 8/6 to 8/8	2.5Y 8/6 to 8/8	2.5Y 8/6 to 8/8	2.5Y 8/6 to 8/8	2.5Y 8/6 to 8/8

SECONDARY SKIN COLOR:
1 = Absent; 2 = Present, please describe_____

V	R1	R2	R3	R4
1	1	1	1	1

IF PRESENT, GIVE COLOR CHART VALUE AND CIRCLE THE APPROPRIATE COLOR CHART
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
-	-	-	-	-

SECONDARY SKIN COLOR DISTRIBUTION: *If present*
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 = Netted; 4 = Russetted; 5 = Heavily russetted; 6 = Other_____

V	R1	R2	R3	R4
1	1	2	5	3

TUBER SHAPE: *(See figure 10)*
1 = Compressed; 2 = Round; 3 = Oval; 4 = Oblong; 5 = Long; 6 = Other_____

V	R1	R2	R3	R4
5	5	3	3	2

TUBE THICKNESS:
1 = Round; 2 = Medium thick; 3 = Slightly flattened; 4 = Flatted; 5 = Other_____

V	R1	R2	R3	R4
1	2	1	2	1

TUBER LENGTH (mm):

AVERAGE:

V	R1	R2	R3	R4
84.7	86.3	88.2	90.5	54.6

RANGE:

V	R1	R2	R3	R4
55 to 110	55 to 120	47 to 130	65 to 150	45 to 72

STANDARD DEVIATION:

V	R1	R2	R3	R4
12.2	15.7	20.2	25.3	7.5

AVERAGE WEIGHT OF SAMPLE TAKEN:

V	R1	R2	R3	R4
2.4	2.4	1.9	2.1	2.3

TUBER WIDTH (mm):

AVERAGE:

V	R1	R2	R3	R4
38.2	51.2	64.3	59.1	49.7

RANGE:

V	R1	R2	R3	R4
25 to 55	35 to 69	41 to 72	45 to 67	41 to 64

STANDARD DEVIATION:

V	R1	R2	R3	R4
4.2	8.2	10.3	5.2	5.9

AVERAGE WEIGHT OF SAMPLE TAKEN:

V	R1	R2	R3	R4
2.4	2.4	1.9	2.1	2.3

TUBER THICKNESS (mm):

AVERAGE:

V	R1	R2	R3	R4
35.7	49.1	59.4	57.2	47.8

RANGE:

V	R1	R2	R3	R4
22 to 52	33 to 56	38 to 67	41 to 66	38 to 61

STANDARD DEVIATION:

V	R1	R2	R3	R4
5.1	6.9	8.2	7.1	5.8

AVERAGE WEIGHT OF SAMPLE TAKEN:

V	R1	R2	R3	R4
2.4	2.4	1.9	2.1	2.3

TUBER EYE DEPTH:

1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very deep

V	R1	R2	R3	R4
2	2	3	3	3

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

V	R1	R2	R3	R4
2	2	3	3	3

NUMBER EYE / TUBER:

AVERAGE:

V	R1	R2	R3	R4
6.1	5.5	6.2	12.4	7.2

RANGE:

V	R1	R2	R3	R4
5 to 8	3 to 8	4 to 8	9 to 14	4 to 10

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

V	R1	R2	R3	R4
1	2	2	2	2

PROMINENCE OF TUBER EYEBROWS:
1 = Not prominent; 2 = Slight prominence; 3 = Medium prominence; 4 = Very prominence; 5 = Other_____

V	R1	R2	R3	R4
2	1	1	2	1

PRIMARY TUBER FLESH COLOR: *Circle the appropriate color chart*
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
-	-	-	-	-

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

V	R1	R2	R3	R4
1	1	1	1	1

IF PRESENT, CIRCLE THE APPROPRIATE COLOR CHART:
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	R1	R2	R3	R4
-	-	-	-	-

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

V	R1	R2	R3	R4
3	2	2	2	2

6. 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

V	R1	R2	R3	R4
0	0	0	0	0

BACTERIAL RING ROT: Tuber reaction

V	R1	R2	R3	R4
0	0	0	0	0

LATE BLIGHT

V	R1	R2	R3	R4
1	5	5	5	7

PLRV (leaf roll)

V	R1	R2	R3	R4
5	0	0	0	0

PVX

V	R1	R2	R3	R4
3	0	0	0	0

PVY

V	R1	R2	R3	R4
7	3	0	0	0

OTHER: Common Scab

V	R1	R2	R3	R4
1	3	0	0	0

OTHER: Wart Disease

V	R1	R2	R3	R4
7	9	0	0	0

7. PESTS CHARACTERISTICS:

PEST REACTION: 0 = NOT TESTED; 1 = RESISTANT; 3 = MODERATELY RESISTANT; 5 = MODERATELY SUSCEPTIBLE; 7=SUSCEPTIBLE; 9=HIGHLY SUSCEPTIBLE

GOLDEN NEMATODE

V	R1	R2	R3	R4
1	7	7	7	7

OTHER: _____

V	R1	R2	R3	R4
0	0	0	0	0

8. GENE TRAITS:

INSERTION OF GENES: [ ] YES [X] NO

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

_____

200100104

9. QUALITY CHARACTERISTIC

CHIEF MARKET: TABLESTOCK

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	3	R1	3	R2	4	R3	4	R4	5

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.

11. CHEMICAL IDENTIFICATION:

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

DNA electrophoresis (AFLPs) patterns.

12. ADDITIONAL COMMENTS AND CHARACTERISTICS:

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

UPOV Variety Description ARD 1241 / Community Plant Variety Office (decision N°EU 3009)

200100104

GERMICOPA

CRÉATION VARIÉTALE & PLANTS DE POMMES DE TERRE

P.V.P. & C.O.V. Applications

2001

Potato Varieties
(Solanum tuberosum ssp. tuberosum)

GERMICOPA S.A.

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29334 QUIMPER Cedex

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QUALITY ASSURED FIRM ISO 9001 SGS N°ICSAQU0364

JULIETTE

***

AFLPs Analysis

Applicant : GERMICOPA SA
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29334 QUIMPER Cedex
FRANCE

* The analysis was performed on behalf of the applicant, by :

PE AgGen Inc., Applied DNA Services
2411 South 1070 West
Salt Lake City, Utah 84119-1555 USA

having an office in France : **AGROGENE**
620, rue Blaise Pascal, Z.I.
77555 MOISSY CRAMAYEL Cedex

* Technics involved have been fully described :

- *publication :* VOS P. and al. (1995). AFLP : a new technique for DNA fingerprinting. Nucleic Acids Res 21 : 4407-4414.

- *European patent* : EP 92402629.7

* Molecular standards are included in the first column of each scanned gel and are referenced as A01 to A08 from the Msp1 Digest of pBR322DNA. Base pairs are :

AØ1 : 622 b.p.	AØ5 : 242 b.p.
AØ2 : 527 b.p.	AØ6 : 238 b.p.
AØ3 : 404 b.p.	AØ7 : 217 b.p.
AØ4 : 307 b.p.	AØ8 : 201 b.p.

The couples «Enzyme/Primers» codification Ei Mj is according the Key Gene codification of the 420 markers.

E32M49 : 32 markers	E39M61 : 35 markers
E32M51 : 44 markers	E36M50 : 40 markers
E32M54 : 51 markers	E36M59 : 58 markers
E39M48 : 36 markers	E39M51 : 37 markers
E39M49 : 51 markers	E36M47 : 35 markers

Visual scoring of the 420 markers was achieved by PE AgGen experts as being present (score = 1), absent (score = 2) or missing data (score = m.d.) and reported in tables, together with copies of scanned gels.

It is the opinion of the applicant that slight differences in the presence or the absence of one or more of the makers here presented might occur because of partial failure in repetability of the technics. A 10% difference or less in the number of bands might be a strong evidence for similarity or genetic derivation from a clone or a cultivar.

Therefore, AFLPs markers might not be looked at solely when assessing identity of a clone and a cultivar : all botanical traits might be considered together with AFLPs by potato experts.

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AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 1

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*	*27*	*29*	*31*
	marker										
N	row n°										
1	E32/M49-M001_X	0	0	0	0	0	0	0	0	0	1
2	E32/M49-M002_X	1	0	1	1	0	0	0	0	1	1
3	E32/M49-M003_X	0	1	0	1	0	0	0	1	1	1
4	E32/M49-M004_X	1	1	1	0	0	1	0	0	0	0
5	E32/M49-M005_X	1	0	1	0	0	0	0	0	1	1
6	E32/M49-M006_X	1	0	1	1	0	0	0	0	0	1
7	E32/M49-M007_X	*	0	0	1	1	1	1	1	1	0
8	E32/M49-M008_X	0	0	0	1	1	1	1	0	1	1
9	E32/M49-M009_X	1	0	1	1	0	1	1	1	1	1
10	E32/M49-M010_X	0	1	0	0	1	0	0	0	0	0
11	E32/M49-M011_X	0	0	0	1	0	0	1	0	0	0
12	E32/M49-M012_X	1	1	1	0	0	0	0	0	1	0
13	E32/M49-M013_X	1	0	1	0	0	0	0	0	0	1
14	E32/M49-M014_X	1	1	1	0	1	1	1	1	1	0
15	E32/M49-M015_X	1	0	1	1	1	1	1	1	1	0
16	E32/M49-M016_X	0	0	0	0	0	0	0	0	0	0
17	E32/M49-M017_X	0	1	1	1	1	1	1	1	0	1
18	E32/M49-M018_X	0	0	1	0	0	0	0	0	0	0
19	E32/M49-M019_X	0	0	1	0	0	0	0	1	0	1
20	E32/M49-M020_X	0	1	0	0	0	0	0	1	0	0
21	E32/M49-M021_X	1	1	0	0	1	0	1	0	1	1
22	E32/M49-M022_X	1	0	1	1	1	1	0	0	0	0
23	E32/M49-M023_X	1	1	1	0	1	1	1	0	1	1
24	E32/M49-M024_X	0	0	0	0	0	0	0	0	0	0
25	E32/M49-M025_X	1	1	1	1	1	1	1	1	1	0
26	E32/M49-M026_X	1	1	1	0	0	0	0	0	1	0
27	E32/M49-M027_X	1	0	1	1	1	1	1	1	1	1
28	E32/M49-M028_X	1	1	0	1	0	1	0	1	0	1
29	E32/M49-M029_X	0	1	0	0	0	0	0	0	0	0
30	E32/M49-M030_X	0	0	0	0	0	0	0	0	0	0
31	E32/M49-M031_X	1	1	1	1	1	1	1	1	1	1
32	E32/M49-M032_X	1	1	1	1	1	1	1	1	1	0

visual scoring
0: absent, 1: present, *: m.d.

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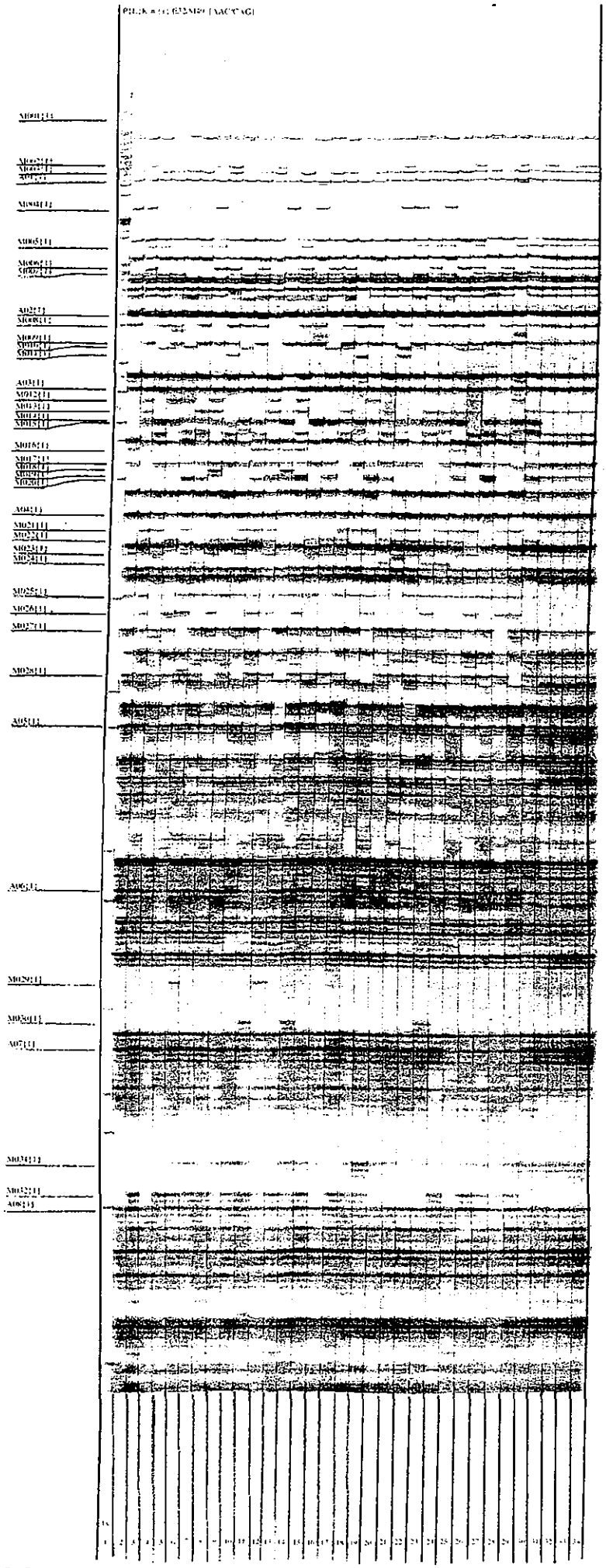

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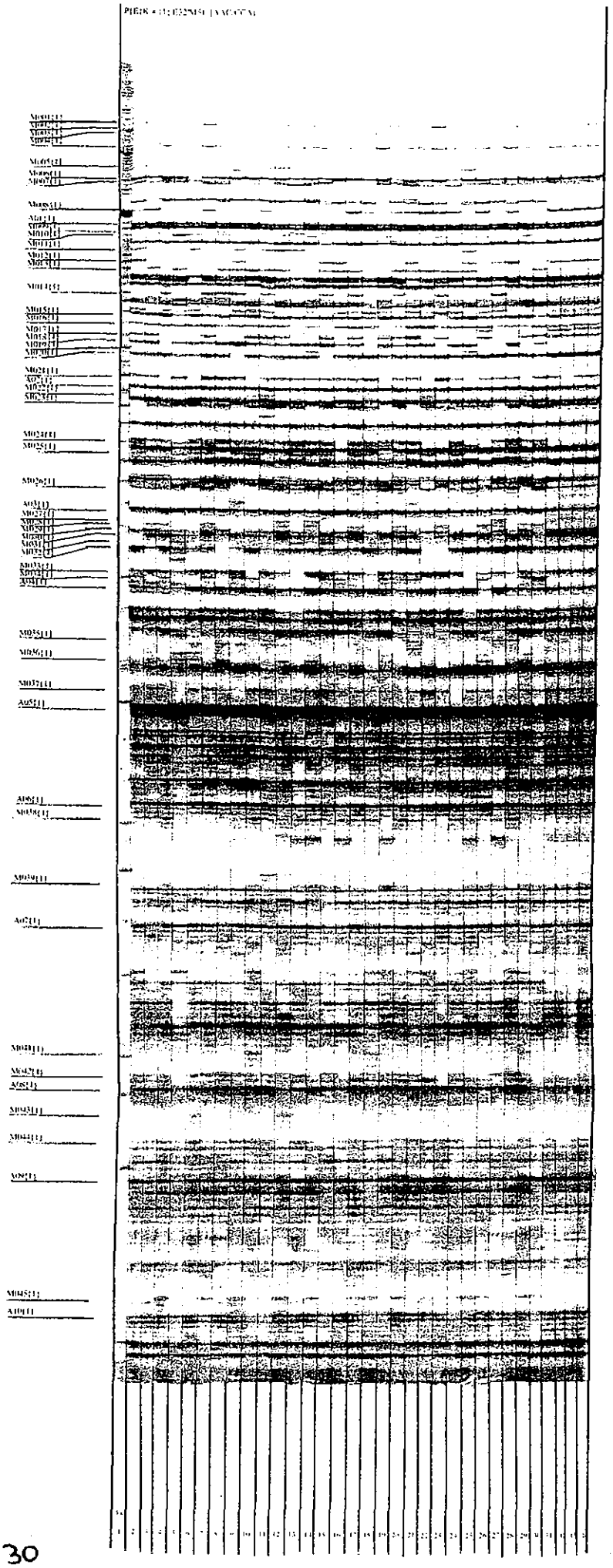
AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 2

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*	*27*	*29*	*31*
	marker										
N	row n°										
33	E32/M51-M001_X	1	0	1	0	0	0	1	1	0	1
34	E32/M51-M002_X	0	0	0	0	0	0	0	0	0	0
35	E32/M51-M003_X	0	0	0	1	1	1	0	0	1	0
36	E32/M51-M004_X	1	1	1	0	1	1	1	1	1	1
37	E32/M51-M005_X	0	0	0	0	0	0	0	0	0	0
38	E32/M51-M006_X	1	0	1	1	1	1	1	1	1	1
39	E32/M51-M007_X	1	0	1	0	1	1	1	1	1	1
40	E32/M51-M008_X	1	0	0	0	0	0	1	0	0	1
41	E32/M51-M009_X	1	0	1	0	0	1	0	0	0	0
42	E32/M51-M010_X	1	1	1	0	0	0	0	0	1	0
43	E32/M51-M011_X	0	1	0	1	0	0	0	0	0	0
44	E32/M51-M012_X	0	0	0	1	0	1	0	1	0	1
45	E32/M51-M013_X	1	0	1	1	1	1	0	0	0	0
46	E32/M51-M014_X	0	0	1	1	0	1	0	1	0	0
47	E32/M51-M015_X	1	1	1	1	1	1	1	1	1	1
48	E32/M51-M016_X	1	1	1	1	1	0	1	1	1	1
49	E32/M51-M017_X	1	0	0	0	1	1	0	0	1	1
50	E32/M51-M018_X	1	1	1	1	1	1	0	0	0	0
51	E32/M51-M019_X	0	0	0	0	0	0	0	0	0	0
52	E32/M51-M020_X	1	1	1	0	1	0	1	1	1	1
53	E32/M51-M021_X	1	0	1	1	0	1	1	1	0	1
54	E32/M51-M022_X	0	0	0	0	1	0	0	0	0	0
55	E32/M51-M023_X	1	1	1	0	1	1	1	0	1	1
56	E32/M51-M024_X	1	1	1	1	1	1	1	1	1	0
57	E32/M51-M025_X	0	1	0	1	1	1	1	0	0	0
58	E32/M51-M026_X	1	1	1	0	0	1	1	1	0	1
59	E32/M51-M027_X	0	0	0	0	0	0	0	1	0	1
60	E32/M51-M028_X	1	0	0	0	0	0	0	1	1	0
61	E32/M51-M029_X	1	1	1	0	1	1	1	1	1	1
62	E32/M51-M030_X	1	1	1	1	1	1	1	1	1	1
63	E32/M51-M031_X	0	0	0	0	0	1	0	0	0	0
64	E32/M51-M032_X	1	1	0	1	1	1	1	1	1	1
65	E32/M51-M033_X	1	1	1	1	0	1	1	1	1	1
66	E32/M51-M034_X	0	0	0	1	1	1	0	0	1	0
67	E32/M51-M035_X	0	0	0	0	0	0	0	1	0	0
68	E32/M51-M036_X	1	1	1	0	0	0	0	0	1	0
69	E32/M51-M037_X	1	1	1	0	1	1	0	0	1	1
70	E32/M51-M038_X	1	0	0	1	1	1	1	*	0	0
71	E32/M51-M039_X	0	0	0	0	1	1	0	1	1	1
72	E32/M51-M041_X	0	0	0	0	1	0	1	0	1	0
73	E32/M51-M042_X	1	1	1	1	1	1	1	1	1	0
74	E32/M51-M043_X	0	1	0	0	0	0	0	0	0	0
75	E32/M51-M044_X	1	1	1	1	1	0	1	1	1	1
76	E32/M51-M045_X	0	0	0	1	1	0	1	0	1	0

visual scoring
0: absent, 1: present, *: m.d.



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AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 3

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	3	6	8	9	10	15	18	27	39	31
N	marker row n°										
77	E32/M54-M001_X	1	1	1	1	1	0	1	1	1	1
78	E32/M54-M002_X	0	0	0	0	0	0	0	0	0	0
79	E32/M54-M003_X	1	0	0	1	0	0	0	0	0	0
80	E32/M54-M004_X	0	1	0	1	1	1	1	0	0	0
81	E32/M54-M005_X	0	1	0	0	0	0	0	0	0	0
82	E32/M54-M006_X	0	0	0	1	1	1	0	1	1	0
83	E32/M54-M007_X	0	0	0	0	0	0	0	0	0	0
84	E32/M54-M008_X	1	*	*	1	*	*	1	0	0	0
85	E32/M54-M009_X	0	1	1	0	0	0	0	0	0	0
86	E32/M54-M010_X	1	0	0	0	1	1	0	0	1	1
87	E32/M54-M011_X	0	0	1	0	0	0	0	0	0	0
88	E32/M54-M012_X	1	1	0	0	1	0	1	0	0	0
89	E32/M54-M013_X	0	0	0	0	1	0	1	1	1	0
90	E32/M54-M014_X	1	0	1	1	1	1	0	0	1	1
91	E32/M54-M015_X	0	1	0	0	0	1	0	0	0	1
92	E32/M54-M017_X	0	1	0	0	0	0	0	0	0	0
93	E32/M54-M018_X	0	1	0	*	1	*	1	1	1	1
94	E32/M54-M019_X	1	1	0	0	1	1	1	0	1	1
95	E32/M54-M020_X	0	1	*	0	1	0	1	1	1	1
96	E32/M54-M021_X	0	0	1	0	0	0	0	0	0	0
97	E32/M54-M022_X	1	0	0	1	1	1	0	1	1	1
98	E32/M54-M023_X	1	0	1	1	1	1	0	0	0	0
99	E32/M54-M024_X	0	0	1	0	0	1	0	1	0	0
100	E32/M54-M025_X	0	0	0	0	0	0	1	0	0	0
101	E32/M54-M027_X	0	1	0	0	1	0	1	0	1	0
102	E32/M54-M028_X	0	1	0	0	0	0	0	0	0	0
103	E32/M54-M029_X	1	1	1	0	0	0	0	0	1	0
104	E32/M54-M030_X	1	0	0	1	0	0	1	0	0	0
105	E32/M54-M031_X	1	1	1	1	1	1	1	1	1	1
106	E32/M54-M032_X	1	1	0	1	0	1	1	1	1	1
107	E32/M54-M033_X	1	1	1	1	1	1	0	0	0	0
108	E32/M54-M034_X	0	0	0	1	1	1	1	1	1	0
109	E32/M54-M035_X	1	1	0	0	0	0	0	0	0	1
110	E32/M54-M036_X	1	0	1	1	0	0	0	0	1	1
111	E32/M54-M038_X	0	0	1	1	1	0	1	0	1	1
112	E32/M54-M039_X	1	1	nd	nd	1	nd	*	1	*	*
113	E32/M54-M040_X	1	0	1	1	1	1	1	1	1	1
114	E32/M54-M041_X	0	1	0	0	0	0	1	0	0	1
115	E32/M54-M042_X	0	1	0	1	1	0	1	1	1	0
116	E32/M54-M043_X	1	1	1	1	1	1	1	0	1	1
117	E32/M54-M044_X	1	0	1	1	1	1	1	0	1	1
118	E32/M54-M046_X	0	1	0	1	0	0	0	1	0	0
119	E32/M54-M047_X	0	0	0	0	0	0	0	1	0	0
120	E32/M54-M048_X	0	0	0	1	0	0	0	0	0	1
121	E32/M54-M049_X	1	1	1	1	1	0	1	1	0	1
122	E32/M54-M050_X	1	0	0	0	0	0	0	0	0	1
123	E32/M54-M051_X	0	0	0	0	0	0	0	1	0	0
124	E32/M54-M052_X	1	1	1	1	1	1	0	1	0	1
125	E32/M54-M053_X	0	0	1	1	0	1	1	1	0	0
126	E32/M54-M054_X	1	1	1	1	0	1	0	1	1	0
127	E32/M54-M056_X	1	0	1	1	1	1	0	1	1	1

visual scoring
0: absent, 1: present, *: n.d.

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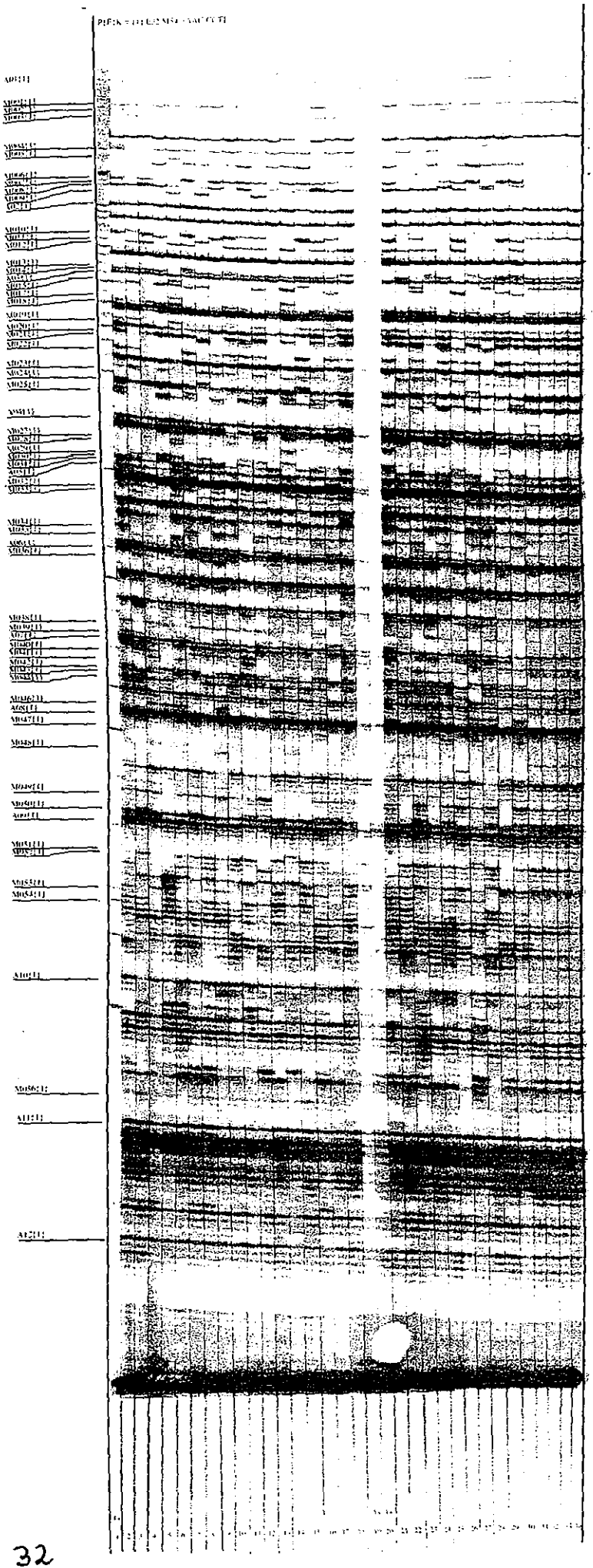
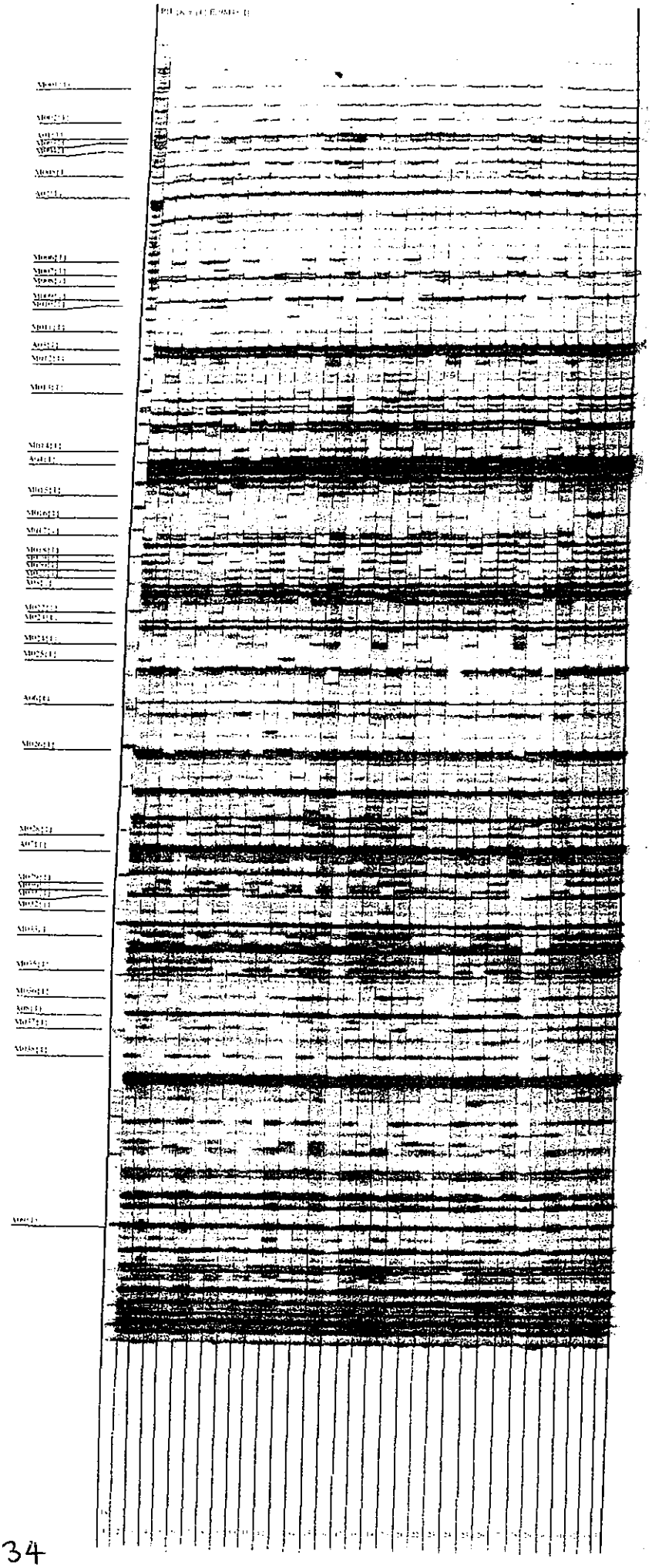


AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 4

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*	*27*	*29*	*31*
N	marker row n°										
128	E39/M48-M001_X	1	1	1	1	0	1	1	1	1	1
129	E39/M48-M002_X	1	0	1	1	1	1	0	0	1	1
130	E39/M48-M003_X	1	1	1	1	0	1	1	1	1	1
131	E39/M48-M004_X	1	0	1	1	1	1	1	1	1	1
132	E39/M48-M005_X	1	0	0	0	0	0	0	0	0	1
133	E39/M48-M006_X	1	1	1	0	0	0	0	0	1	0
134	E39/M48-M007_X	1	0	0	0	1	1	0	0	1	1
135	E39/M48-M008_X	0	0	0	0	0	0	0	0	0	0
136	E39/M48-M009_X	1	1	1	1	0	0	1	0	1	1
137	E39/M48-M010_X	0	1	0	0	0	0	0	0	0	0
138	E39/M48-M011_X	1	1	1	1	1	1	1	1	1	1
139	E39/M48-M012_X	0	0	0	0	0	0	0	1	0	0
140	E39/M48-M013_X	0	0	0	0	0	0	0	0	0	0
141	E39/M48-M014_X	1	1	1	0	1	1	1	0	1	0
142	E39/M48-M015_X	1	0	0	0	0	1	0	*	1	0
143	E39/M48-M016_X	1	0	0	0	0	0	1	0	0	1
144	E39/M48-M017_X	1	0	1	1	1	1	1	1	1	0
145	E39/M48-M018_X	1	1	0	1	0	1	1	1	1	1
146	E39/M48-M019_X	1	1	1	0	1	0	1	1	1	1
147	E39/M48-M020_X	1	0	1	1	1	1	0	1	1	1
148	E39/M48-M021_X	1	0	1	1	1	1	1	0	1	1
149	E39/M48-M022_X	0	0	0	0	0	0	0	0	0	0
150	E39/M48-M023_X	1	0	1	1	1	1	1	1	1	1
151	E39/M48-M024_X	0	0	0	1	1	1	1	1	1	0
152	E39/M48-M025_X	0	0	0	0	0	0	0	0	0	0
153	E39/M48-M026_X	1	1	1	1	0	1	1	0	1	1
154	E39/M48-M028_X	1	1	1	1	1	1	1	1	1	1
155	E39/M48-M029_X	0	0	0	0	1	0	0	0	0	1
156	E39/M48-M030_X	1	1	1	1	1	1	1	0	0	0
157	E39/M48-M031_X	1	1	1	0	1	1	1	0	1	1
158	E39/M48-M032_X	1	1	1	0	0	0	0	0	1	0
159	E39/M48-M033_X	1	0	0	1	0	0	1	0	0	1
160	E39/M48-M035_X	1	1	0	0	1	1	1	1	1	1
161	E39/M48-M036_X	0	0	1	1	1	1	0	1	1	1
162	E39/M48-M037_X	1	1	1	1	1	1	0	1	1	1
163	E39/M48-M038_X	0	1	0	1	1	0	1	1	1	0

visual scoring
0: absent, 1: present, *: m.d.



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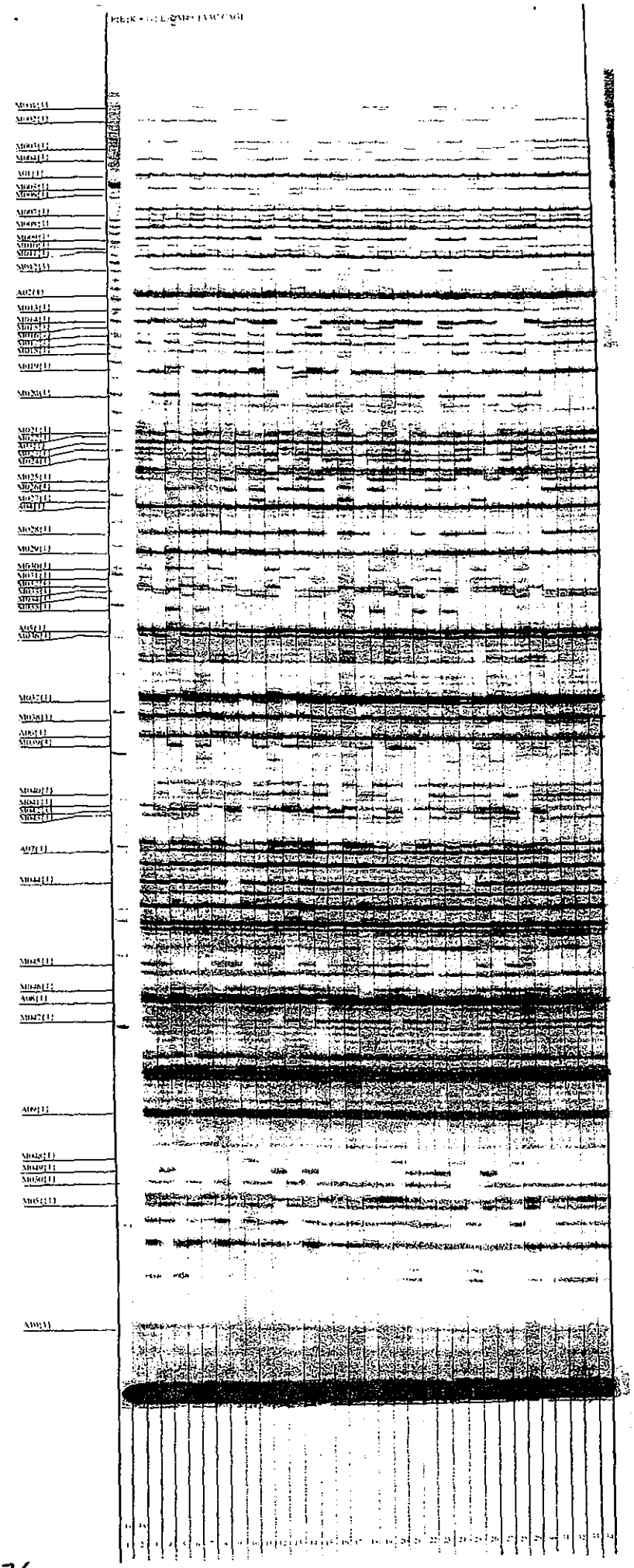
AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 5

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	3	6	8	9	10	15	18	27	29	31
N	marker row n°										
164	E39/M49-M001_X	0	0	0	0	0	1	1	1	1	0
165	E39/M49-M002_X	1	1	1	0	0	0	0	1	0	1
166	E39/M49-M003_X	0	0	0	0	1	0	1	1	0	1
167	E39/M49-M004_X	1	0	1	0	0	1	1	1	1	1
168	E39/M49-M005_X	1	0	1	1	1	1	1	1	1	1
169	E39/M49-M006_X	0	0	0	0	0	0	0	0	0	0
170	E39/M49-M007_X	*	1	1	1	0	0	0	1	1	1
171	E39/M49-M008_X	0	1	0	0	0	0	1	0	1	0
172	E39/M49-M009_X	1	1	1	1	1	1	1	1	1	0
173	E39/M49-M010_X	1	0	0	0	0	1	0	0	0	1
174	E39/M49-M011_X	1	1	1	1	1	1	0	1	1	0
175	E39/M49-M012_X	0	1	0	1	0	1	0	0	0	1
176	E39/M49-M013_X	1	0	1	1	1	1	1	1	1	0
177	E39/M49-M014_X	1	1	1	1	0	0	1	1	0	1
178	E39/M49-M015_X	0	*	0	0	0	1	0	0	0	1
179	E39/M49-M016_X	1	0	1	1	0	1	1	1	1	0
180	E39/M49-M017_X	1	0	1	1	1	1	1	1	1	1
181	E39/M49-M018_X	0	1	0	0	1	0	0	0	1	0
182	E39/M49-M019_X	0	0	0	0	0	1	0	0	0	0
183	E39/M49-M020_X	0	0	1	1	1	1	1	0	1	0
184	E39/M49-M021_X	1	0	1	1	1	1	0	0	1	1
185	E39/M49-M022_X	1	1	1	1	1	1	1	1	1	1
186	E39/M49-M023_X	1	0	1	0	1	1	0	0	1	0
187	E39/M49-M024_X	1	1	0	0	0	0	0	0	0	1
188	E39/M49-M025_X	1	1	1	1	0	1	0	1	1	1
189	E39/M49-M026_X	0	0	0	1	0	1	0	0	0	1
190	E39/M49-M027_X	0	0	0	0	0	0	0	0	0	0
191	E39/M49-M028_X	1	1	1	1	1	1	1	0	0	1
192	E39/M49-M029_X	1	0	1	0	1	0	0	0	1	0
193	E39/M49-M030_X	1	1	1	0	0	0	0	0	1	0
194	E39/M49-M031_X	1	1	0	1	0	1	0	1	0	0
195	E39/M49-M032_X	1	1	0	1	0	0	1	1	0	0
196	E39/M49-M033_X	1	0	1	1	1	1	1	1	1	1
197	E39/M49-M034_X	0	1	0	0	1	1	0	0	1	1
198	E39/M49-M035_X	0	0	0	0	0	0	0	0	0	0
199	E39/M49-M036_X	*	1	1	1	1	1	1	1	1	1
200	E39/M49-M037_X	1	1	1	1	0	1	1	1	1	1
201	E39/M49-M038_X	*	0	0	0	0	0	0	0	0	1
202	E39/M49-M039_X	0	0	0	0	0	0	1	0	0	0
203	E39/M49-M040_X	0	1	1	1	1	1	1	0	0	1
204	E39/M49-M041_X	1	1	0	1	0	1	0	1	0	0
205	E39/M49-M042_X	0	1	0	1	0	0	0	1	0	0
206	E39/M49-M043_X	1	1	0	0	0	1	0	1	0	1
207	E39/M49-M044_X	1	1	1	0	1	1	1	1	1	1
208	E39/M49-M045_X	1	0	1	1	0	0	1	0	1	0
209	E39/M49-M046_X	1	1	0	1	1	1	0	1	1	1
210	E39/M49-M047_X	1	0	1	0	1	1	1	1	1	1
211	E39/M49-M048_X	0	0	0	0	1	0	0	0	0	0
212	E39/M49-M049_X	0	0	0	0	0	0	0	0	0	0
213	E39/M49-M050_X	1	1	1	0	1	1	1	1	1	1
214	E39/M49-M051_X	1	1	1	1	1	0	1	1	1	1

visual scoring
0: absent, 1: present, *: n.d.



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AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 6

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*	*27*	*29*	*31*
N	marker row n°										
215	E39/M61-M001_X	0	0	0	1	1	0	0	0	0	1
216	E39/M61-M002_X	1	1	1	1	1	1	1	1	1	1
217	E39/M61-M003_X	1	0	1	0	1	0	0	1	0	0
218	E39/M61-M004_X	0	0	0	0	0	0	0	0	0	0
219	E39/M61-M005_X	1	0	0	0	0	0	0	0	0	1
220	E39/M61-M006_X	1	0	1	0	1	0	0	1	0	0
221	E39/M61-M007_X	1	0	1	0	0	1	0	1	0	1
222	E39/M61-M008_X	1	0	0	0	0	0	0	1	0	0
223	E39/M61-M009_X	1	1	1	1	0	1	1	1	1	1
224	E39/M61-M010_X	0	0	0	0	0	0	0	0	0	0
225	E39/M61-M011_X	0	0	0	1	1	1	0	1	1	1
226	E39/M61-M012_X	0	0	0	0	0	0	0	0	0	0
227	E39/M61-M013_X	1	1	1	1	1	0	1	1	1	0
228	E39/M61-M014_X	0	0	1	0	1	1	1	1	1	0
229	E39/M61-M015_X	0	1	1	1	0	0	0	0	0	1
230	E39/M61-M016_X	1	0	1	1	1	1	0	0	0	0
231	E39/M61-M017_X	0	1	0	0	1	0	0	0	0	0
232	E39/M61-M018_X	1	*	1	1	1	1	1	1	1	1
233	E39/M61-M019_X	1	1	0	1	1	1	1	0	0	1
234	E39/M61-M020_X	0	0	0	0	0	0	0	0	0	0
235	E39/M61-M021_X	1	0	0	0	0	0	0	0	0	0
236	E39/M61-M022_X	0	1	1	1	0	0	0	1	0	0
237	E39/M61-M023_X	0	0	0	0	0	0	0	0	0	0
238	E39/M61-M024_X	0	1	0	0	1	0	0	0	0	1
239	E39/M61-M025_X	0	0	0	0	0	0	0	0	0	0
240	E39/M61-M026_X	1	1	1	0	1	1	0	0	1	0
241	E39/M61-M027_X	1	1	1	1	1	1	0	0	0	0
242	E39/M61-M028_X	0	0	0	0	0	0	1	0	0	1
243	E39/M61-M029_X	0	1	0	1	1	0	1	1	1	0
244	E39/M61-M030_X	1	1	1	1	1	1	1	1	0	1
245	E39/M61-M031_X	1	1	1	1	1	1	1	0	1	1
246	E39/M61-M032_X	0	0	0	0	0	0	0	0	0	1
247	E39/M61-M033_X	1	1	1	1	1	1	1	1	0	1
248	E39/M61-M034_X	0	0	0	1	0	0	0	1	*	1
249	E39/M61-M035_X	1	1	1	1	0	1	1	*	1	0

visual scoring
0: absent, 1: present, *: m.d.

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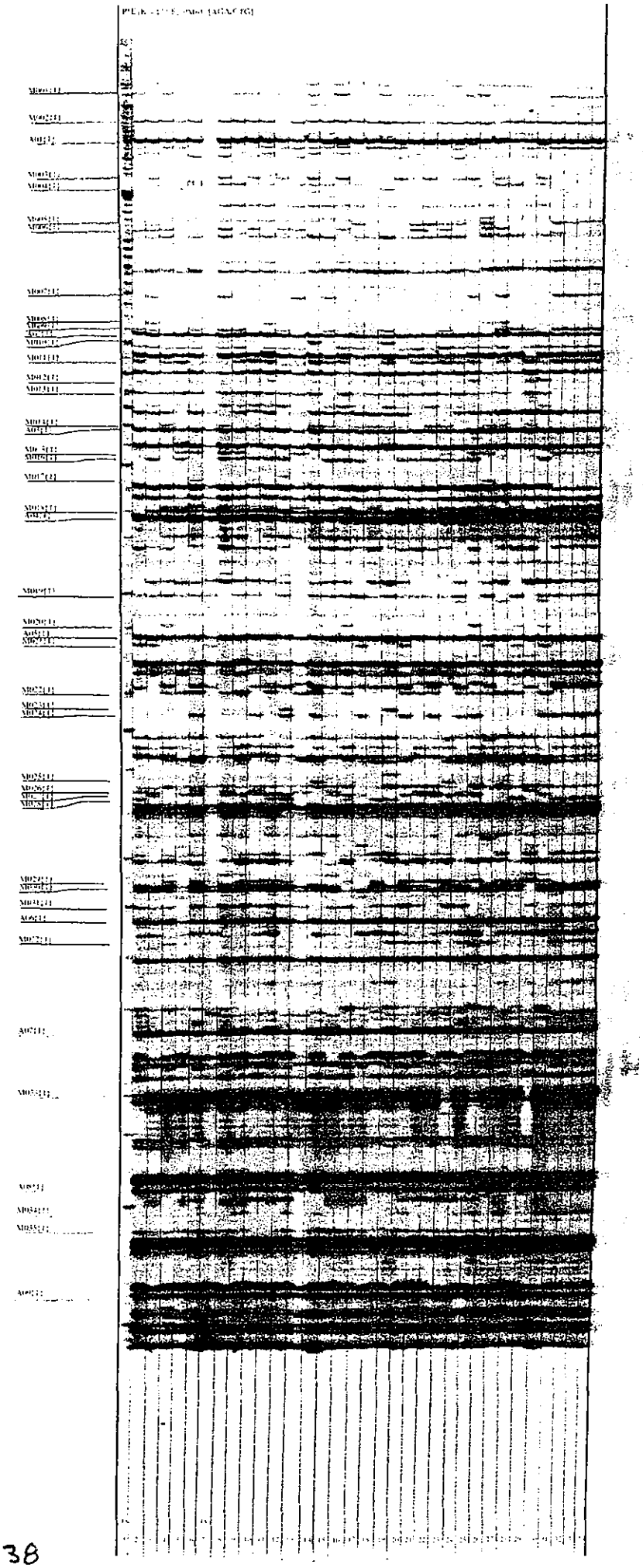

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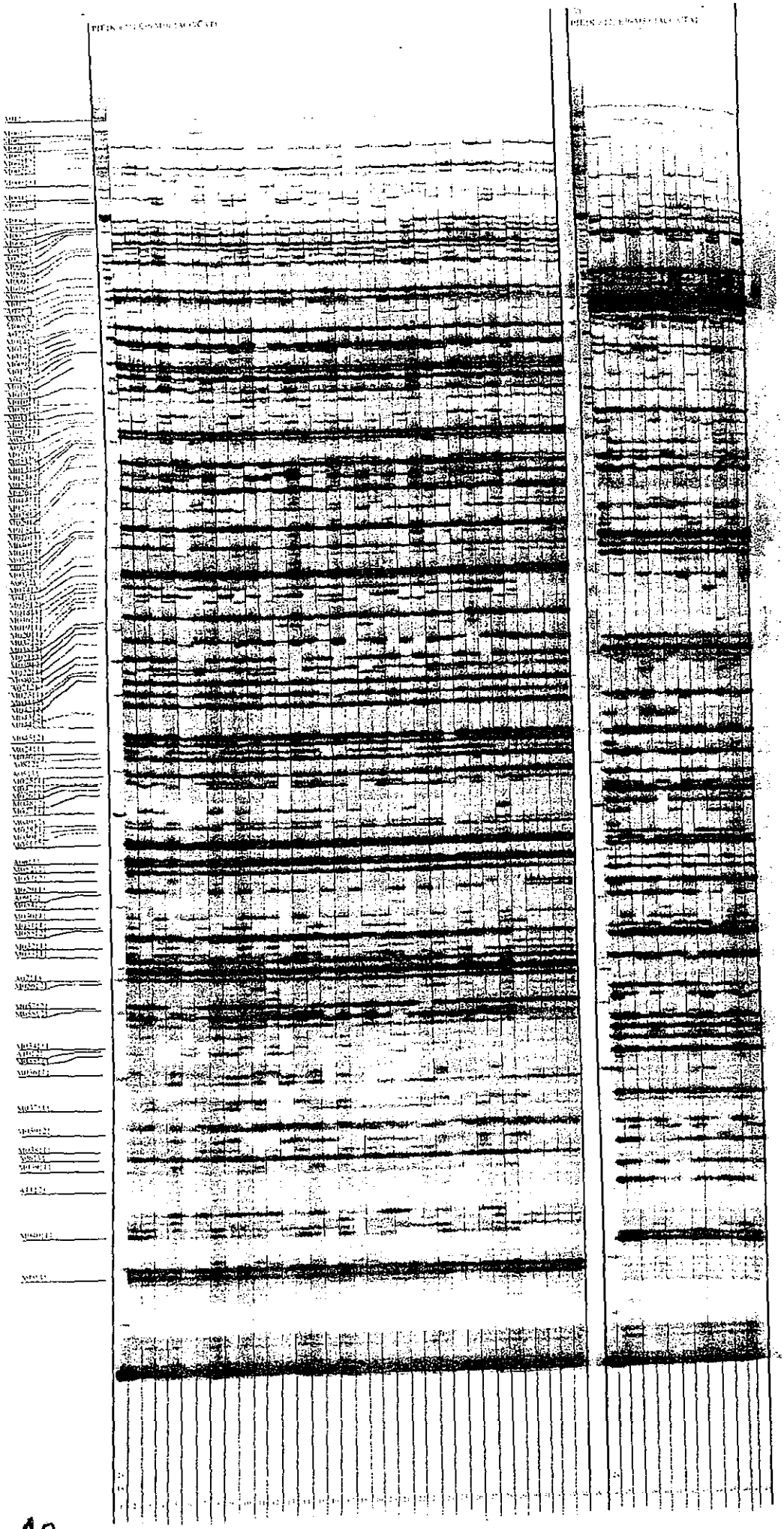
AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 7

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*	*27*	*29*	*31*
N	marker row n°										
250	E36/M50-M001_X	1	1	1	1	1	1	1	0	1	1
251	E36/M50-M002_X	1	1	1	1	1	1	1	1	1	1
252	E36/M50-M003_X	1	0	1	0	0	1	0	0	0	0
253	E36/M50-M004_X	1	0	1	0	1	1	1	0	1	1
254	E36/M50-M005_X	0	0	0	0	1	0	0	0	1	0
255	E36/M50-M006_X	1	1	1	1	1	1	1	1	1	1
256	E36/M50-M007_X	0	1	1	1	0	0	0	0	1	1
257	E36/M50-M008_X	1	0	0	0	0	0	0	0	0	1
258	E36/M50-M009_X	1	0	1	1	1	1	0	0	0	0
259	E36/M50-M010_X	0	0	0	0	0	1	0	0	0	0
260	E36/M50-M011_X	0	1	0	0	1	0	0	1	1	0
261	E36/M50-M012_X	1	0	0	1	0	0	1	0	0	1
262	E36/M50-M013_X	0	0	0	0	1	1	0	1	1	0
263	E36/M50-M014_X	1	1	0	0	0	1	1	1	1	1
264	E36/M50-M015_X	0	0	0	0	0	0	0	0	1	1
265	E36/M50-M016_X	1	1	1	1	1	1	0	1	1	1
266	E36/M50-M017_X	0	0	0	0	0	0	1	1	0	1
267	E36/M50-M018_X	1	1	1	1	1	1	1	1	1	0
268	E36/M50-M019_X	1	1	0	1	0	0	0	1	0	0
269	E36/M50-M020_X	1	0	1	0	1	0	1	0	1	0
270	E36/M50-M021_X	0	0	0	0	0	0	0	1	0	0
271	E36/M50-M022_X	0	1	0	0	1	0	0	0	0	1
272	E36/M50-M023_X	0	1	0	0	0	0	0	0	0	0
273	E36/M50-M024_X	0	1	0	1	1	1	1	1	0	1
274	E36/M50-M025_X	0	0	1	1	1	1	0	1	1	1
275	E36/M50-M026_X	1	0	1	1	1	1	0	1	0	0
276	E36/M50-M027_X	1	0	1	0	1	1	1	0	1	0
277	E36/M50-M028_X	1	1	1	0	1	1	1	1	1	1
278	E36/M50-M029_X	1	0	1	0	1	0	1	1	0	1
279	E36/M50-M030_X	0	1	0	0	1	0	0	0	1	1
280	E36/M50-M031_X	0	0	0	1	1	1	0	0	1	0
281	E36/M50-M032_X	0	1	0	0	1	0	1	0	0	1
282	E36/M50-M033_X	0	1	0	0	1	1	0	0	1	1
283	E36/M50-M034_X	0	1	0	0	1	0	1	0	0	1
284	E36/M50-M035_X	0	1	1	1	0	0	0	0	0	0
285	E36/M50-M036_X	0	1	0	0	0	1	0	0	0	0
286	E36/M50-M037_X	1	0	1	1	0	1	1	1	1	1
287	E36/M50-M038_X	0	0	1	1	0	0	1	1	1	1
288	E36/M50-M039_X	0	0	0	0	0	1	0	0	0	0
289	E36/M50-M040_X	1	1	1	1	1	1	1	1	1	0

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia
	column n°	*38*	*41*	*43*	*44*	*45*
N	marker row n°					
290	E36/M59-M001_X	0	1	0	0	0
291	E36/M59-M002_X	0	1	0	0	0
292	E36/M59-M003_X	1	0	1	0	0
293	E36/M59-M004_X	0	0	0	0	0
294	E36/M59-M005_X	1	1	1	1	1
295	E36/M59-M006_X	0	1	0	0	0
296	E36/M59-M007_X	1	0	1	0	1
297	E36/M59-M008_X	1	1	1	1	0
298	E36/M59-M009_X	1	0	1	1	0
299	E36/M59-M010_X	0	0	0	0	0
300	E36/M59-M011_X	1	1	1	1	1
301	E36/M59-M012_X	0	1	0	1	0
302	E36/M59-M013_X	1	1	1	1	1
303	E36/M59-M014_X	1	1	1	1	1
304	E36/M59-M015_X	0	0	0	0	0
305	E36/M59-M016_X	0	0	0	0	0
306	E36/M59-M017_X	0	1	0	0	0
307	E36/M59-M018_X	0	0	0	0	1
308	E36/M59-M019_X	1	0	1	0	0
309	E36/M59-M020_X	1	1	1	1	1
310	E36/M59-M021_X	0	0	0	0	0
311	E36/M59-M022_X	0	1	0	0	0
312	E36/M59-M023_X	0	0	0	0	1
313	E36/M59-M024_X	0	0	0	0	0
314	E36/M59-M025_X	0	0	0	0	0
315	E36/M59-M026_X	1	1	1	1	0
316	E36/M59-M027_X	1	1	1	0	0
317	E36/M59-M028_X	1	1	1	1	1
318	E36/M59-M029_X	1	1	1	0	1
319	E36/M59-M030_X	0	1	0	0	0
320	E36/M59-M031_X	0	1	0	0	0
321	E36/M59-M032_X	1	1	1	1	1
322	E36/M59-M033_X	0	0	0	0	0
323	E36/M59-M034_X	1	1	1	1	1
324	E36/M59-M035_X	0	0	0	0	0
325	E36/M59-M036_X	0	0	0	1	0
326	E36/M59-M037_X	0	0	0	0	1
327	E36/M59-M038_X	0	0	0	0	0
328	E36/M59-M039_X	0	0	0	0	0
329	E36/M59-M040_X	0	0	0	0	0
330	E36/M59-M041_X	1	1	1	1	*
331	E36/M59-M042_X	0	0	0	0	0
332	E36/M59-M043_X	1	0	1	1	0
333	E36/M59-M044_X	0	*	0	0	0
334	E36/M59-M045_X	1	1	1	1	0
335	E36/M59-M046_X	0	*	0	0	0
336	E36/M59-M047_X	1	1	1	1	1
337	E36/M59-M048_X	1	1	1	1	1
338	E36/M59-M049_X	1	0	1	0	1
339	E36/M59-M050_X	0	0	0	0	0
340	E36/M59-M051_X	1	1	1	0	1
341	E36/M59-M052_X	1	1	1	1	1
342	E36/M59-M053_X	1	1	1	1	1
343	E36/M59-M054_X	1	1	1	1	*
344	E36/M59-M055_X	1	1	1	1	0
345	E36/M59-M056_X	0	0	0	0	0
346	E36/M59-M057_X	1	0	1	1	1
347	E36/M59-M058_X	0	0	0	0	0
348	E36/M59-M059_X	1	0	1	1	0

visual scoring
0: absent, 1: present, *: m.d.



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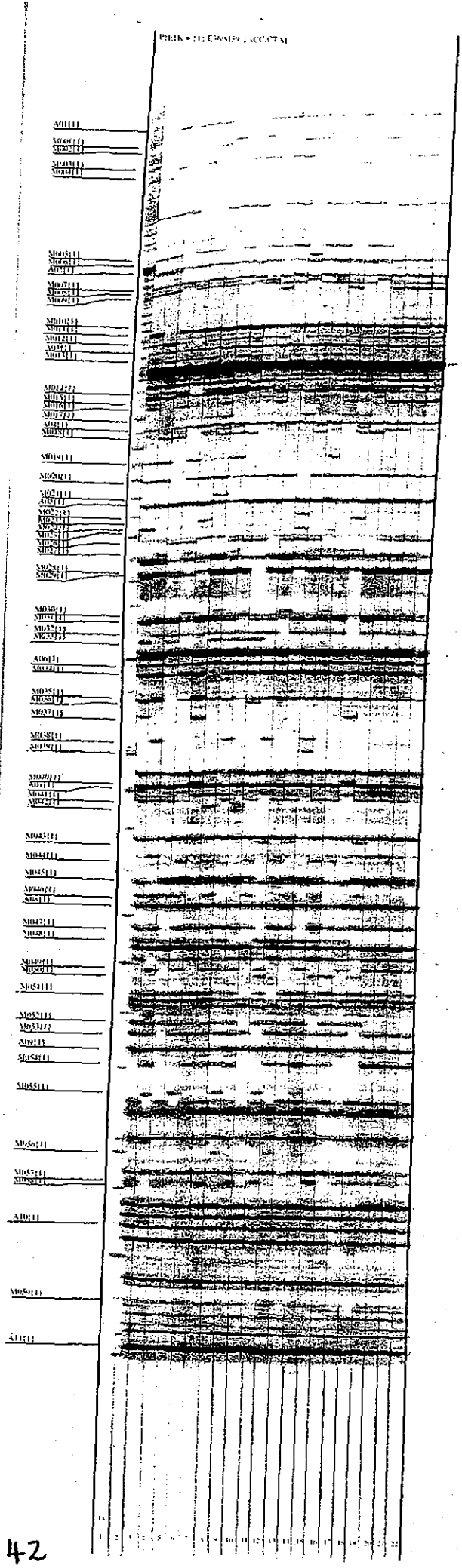
AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 8

	VARIETY	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*3*	*6*	*15*	*17*	*19*
N	marker row n°					
290	E36/M59-M001_X	0	0	0	1	1
291	E36/M59-M002_X	0	1	1	1	1
292	E36/M59-M003_X	1	0	0	0	1
293	E36/M59-M004_X	0	0	0	0	0
294	E36/M59-M005_X	1	1	1	1	0
295	E36/M59-M006_X	0	0	0	0	0
296	E36/M59-M007_X	0	0	1	0	0
297	E36/M59-M008_X	1	1	1	1	1
298	E36/M59-M009_X	0	0	0	0	1
299	E36/M59-M010_X	0	0	0	0	1
300	E36/M59-M011_X	0	1	1	1	1
301	E36/M59-M012_X	1	1	1	1	1
302	E36/M59-M013_X	1	1	1	1	0
303	E36/M59-M014_X	1	1	1	1	1
304	E36/M59-M015_X	0	1	0	0	0
305	E36/M59-M016_X	0	0	0	0	1
306	E36/M59-M017_X	0	0	0	1	0
307	E36/M59-M018_X	1	0	0	1	0
308	E36/M59-M019_X	1	0	1	0	0
309	E36/M59-M020_X	1	1	1	1	1
310	E36/M59-M021_X	0	0	0	0	0
311	E36/M59-M022_X	0	0	0	0	0
312	E36/M59-M023_X	0	1	0	1	0
313	E36/M59-M024_X	0	0	0	0	0
314	E36/M59-M025_X	0	0	0	0	0
315	E36/M59-M026_X	0	0	0	0	1
316	E36/M59-M027_X	1	0	1	1	0
317	E36/M59-M028_X	1	1	1	1	1
318	E36/M59-M029_X	1	0	1	0	1
319	E36/M59-M030_X	0	0	1	0	0
320	E36/M59-M031_X	1	1	1	0	1
321	E36/M59-M032_X	1	1	1	0	1
322	E36/M59-M033_X	0	0	0	0	0
323	E36/M59-M034_X	1	1	1	1	1
324	E36/M59-M035_X	1	1	0	0	0
325	E36/M59-M036_X	0	0	0	0	0
326	E36/M59-M037_X	0	1	0	1	0
327	E36/M59-M038_X	1	0	0	0	0
328	E36/M59-M039_X	0	0	0	0	0
329	E36/M59-M040_X	0	1	0	1	0
330	E36/M59-M041_X	1	0	1	0	1
331	E36/M59-M042_X	0	0	0	0	0
332	E36/M59-M043_X	0	0	0	0	0
333	E36/M59-M044_X	0	0	1	0	0
334	E36/M59-M045_X	0	1	1	0	1
335	E36/M59-M046_X	1	0	1	0	0
336	E36/M59-M047_X	1	1	1	1	1
337	E36/M59-M048_X	1	1	1	1	0
338	E36/M59-M049_X	1	0	0	1	1
339	E36/M59-M050_X	0	0	1	0	0
340	E36/M59-M051_X	1	1	1	1	1
341	E36/M59-M052_X	1	1	0	1	0
342	E36/M59-M053_X	1	1	1	1	1
343	E36/M59-M054_X	1	1	1	0	1
344	E36/M59-M055_X	1	0	0	0	0
345	E36/M59-M056_X	0	0	0	0	0
346	E36/M59-M057_X	0	1	1	1	1
347	E36/M59-M058_X	0	0	0	0	0
348	E36/M59-M059_X	1	1	1	1	1

visual scoring
0: absent, 1: present, *: n.d.



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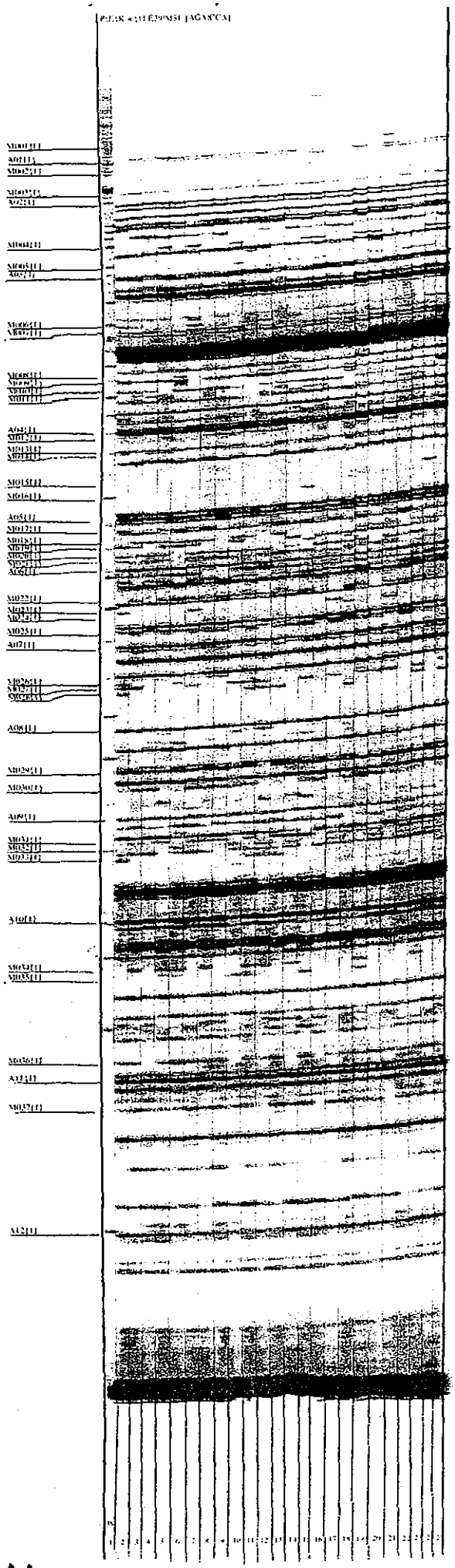
AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 9

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine
	column n°	*3*	*6*	*8*	*9*	*10*	*15*	*18*
	marker							
N	row n°							
349	E39/M51-M001_X	0	0	1	1	0	0	1
350	E39/M51-M002_X	0	0	0	0	0	1	0
351	E39/M51-M003_X	1	0	1	1	1	1	0
352	E39/M51-M004_X	0	0	0	0	1	1	0
353	E39/M51-M005_X	0	1	0	0	1	0	0
354	E39/M51-M006_X	1	0	0	0	0	0	1
355	E39/M51-M007_X	1	1	1	1	1	1	1
356	E39/M51-M008_X	0	1	0	0	0	0	0
357	E39/M51-M009_X	0	1	0	0	0	0	1
358	E39/M51-M010_X	1	1	1	1	1	1	0
359	E39/M51-M011_X	0	0	1	0	0	1	0
360	E39/M51-M012_X	0	0	1	1	1	0	0
361	E39/M51-M013_X	1	1	1	1	1	1	1
362	E39/M51-M014_X	0	0	1	1	1	1	1
363	E39/M51-M015_X	0	0	0	0	0	0	0
364	E39/M51-M016_X	0	0	0	0	0	1	0
365	E39/M51-M017_X	0	1	1	0	*	1	0
366	E39/M51-M018_X	1	1	1	0	1	0	0
367	E39/M51-M019_X	1	1	0	0	1	0	1
368	E39/M51-M020_X	1	0	1	1	1	0	1
369	E39/M51-M021_X	0	0	1	1	1	1	1
370	E39/M51-M022_X	1	1	1	1	1	1	1
371	E39/M51-M023_X	0	0	0	0	0	0	0
372	E39/M51-M024_X	0	0	0	0	0	0	1
373	E39/M51-M025_X	1	0	1	1	0	1	1
374	E39/M51-M026_X	0	1	0	0	0	0	0
375	E39/M51-M027_X	1	0	0	0	1	1	0
376	E39/M51-M028_X	0	0	0	0	0	0	0
377	E39/M51-M029_X	1	1	1	1	1	1	1
378	E39/M51-M030_X	1	0	1	1	1	1	1
379	E39/M51-M031_X	1	0	1	1	0	1	1
380	E39/M51-M032_X	0	1	0	0	1	0	0
381	E39/M51-M033_X	0	0	0	0	0	0	0
382	E39/M51-M034_X	1	1	1	0	0	0	0
383	E39/M51-M035_X	0	0	0	0	1	1	0
384	E39/M51-M036_X	1	1	1	1	0	1	1
385	E39/M51-M037_X	*	*	*	*	*	1	1

visual scoring
0: absent, 1: present, *: m.d.



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AFLP's patterns
of 8 GERMICOPA's Potato Varieties versus Standards cv.BINTJE cv.CHARLOTTE

Table 10

	VARIETY	Sandy	Sylvia	Bintje
	column n°	*3*	*5*	*7*
	marker			
N	row n°			
349	E39/M51-M001_X	0	0	1
350	E39/M51-M002_X	0	0	0
351	E39/M51-M003_X	0	1	1
352	E39/M51-M004_X	1	1	0
353	E39/M51-M005_X	0	0	0
354	E39/M51-M006_X	1	0	1
355	E39/M51-M007_X	1	1	1
356	E39/M51-M008_X	1	1	1
357	E39/M51-M009_X	0	1	1
358	E39/M51-M010_X	1	1	0
359	E39/M51-M011_X	0	0	1
360	E39/M51-M012_X	1	0	1
361	E39/M51-M013_X	1	1	1
362	E39/M51-M014_X	0	1	1
363	E39/M51-M015_X	0	0	0
364	E39/M51-M016_X	0	0	0
365	E39/M51-M017_X	1	0	0
366	E39/M51-M018_X	1	1	1
367	E39/M51-M019_X	1	1	1
368	E39/M51-M020_X	1	1	1
369	E39/M51-M021_X	1	1	1
370	E39/M51-M022_X	1	0	1
371	E39/M51-M023_X	0	0	0
372	E39/M51-M024_X	0	0	0
373	E39/M51-M025_X	1	1	1
374	E39/M51-M026_X	0	0	0
375	E39/M51-M027_X	0	1	1
376	E39/M51-M028_X	0	0	0
377	E39/M51-M029_X	1	1	1
378	E39/M51-M030_X	1	1	1
379	E39/M51-M031_X	1	1	1
380	E39/M51-M032_X	0	0	1
381	E39/M51-M033_X	0	0	0
382	E39/M51-M034_X	0	1	0
383	E39/M51-M035_X	0	0	1
384	E39/M51-M036_X	1	1	0
385	E39/M51-M037_X	1	1	1

	VARIETY	Amandine	Blondy	Charlotte	Cherie	Cynthia	Juliette	Marine	Sandy	Sylvia	Bintje
	column n°	*14*	*17*	*19*	*20*	*21*	*26*	*29*	*38*	*40*	*42*
	marker										
N	row n°										
386	E36/M47-M001_X	0	1	0	1	0	0	0	1	0	0
387	E36/M47-M002_X	0	1	0	1	0	0	0	1	0	0
388	E36/M47-M003_X	0	0	0	1	1	1	0	0	1	0
389	E36/M47-M004_X	1	0	1	0	0	1	1	1	1	1
390	E36/M47-M005_X	1	1	1	1	1	1	0	1	1	1
391	E36/M47-M006_X	1	1	0	1	1	0	0	0	0	1
392	E36/M47-M007_X	1	1	1	1	1	1	1	1	1	1
393	E36/M47-M008_X	0	1	0	1	1	1	1	0	1	1
394	E36/M47-M009_X	0	1	1	1	0	1	1	1	0	1
395	E36/M47-M010_X	0	0	0	0	1	0	0	1	0	1
396	E36/M47-M011_X	1	1	1	0	1	1	1	1	0	1
397	E36/M47-M012_X	0	1	1	1	1	1	1	1	1	1
398	E36/M47-M013_X	0	1	0	0	1	0	1	0	0	1
399	E36/M47-M014_X	1	1	1	1	1	1	1	0	0	1
400	E36/M47-M015_X	1	1	1	1	1	1	1	1	1	1
401	E36/M47-M016_X	0	0	1	0	0	0	0	0	0	0
402	E36/M47-M017_X	1	0	1	0	1	1	1	0	1	1
403	E36/M47-M018_X	0	0	0	0	0	1	0	0	0	0
404	E36/M47-M019_X	0	0	0	1	0	0	0	0	0	0
405	E36/M47-M020_X	1	1	1	1	1	0	1	1	0	1
406	E36/M47-M021_X	0	0	0	1	0	0	0	0	0	0
407	E36/M47-M022_X	1	0	0	0	0	0	0	0	0	0
408	E36/M47-M023_X	1	0	1	1	1	1	1	1	1	1
409	E36/M47-M024_X	0	0	1	0	1	1	1	1	1	0
410	E36/M47-M025_X	0	1	0	0	1	0	1	1	1	0
411	E36/M47-M026_X	1	1	1	1	0	0	1	0	0	1
412	E36/M47-M027_X	0	0	1	1	1	1	1	1	1	1
413	E36/M47-M028_X	1	0	0	1	1	1	0	1	1	0
414	E36/M47-M029_X	0	0	0	0	0	0	0	1	0	1
415	E36/M47-M030_X	1	1	1	0	0	0	0	0	1	0
416	E36/M47-M031_X	0	0	0	0	0	1	0	0	0	0
417	E36/M47-M032_X	0	0	1	0	0	0	0	1	0	1
418	E36/M47-M033_X	0	0	0	0	1	0	0	0	0	1
419	E36/M47-M034_X	1	0	0	0	1	1	0	0	1	1
420	E36/M47-M035_X	1	1	1	1	1	1	1	1	1	1

visual scoring
0: absent, 1: present, *: m.d.

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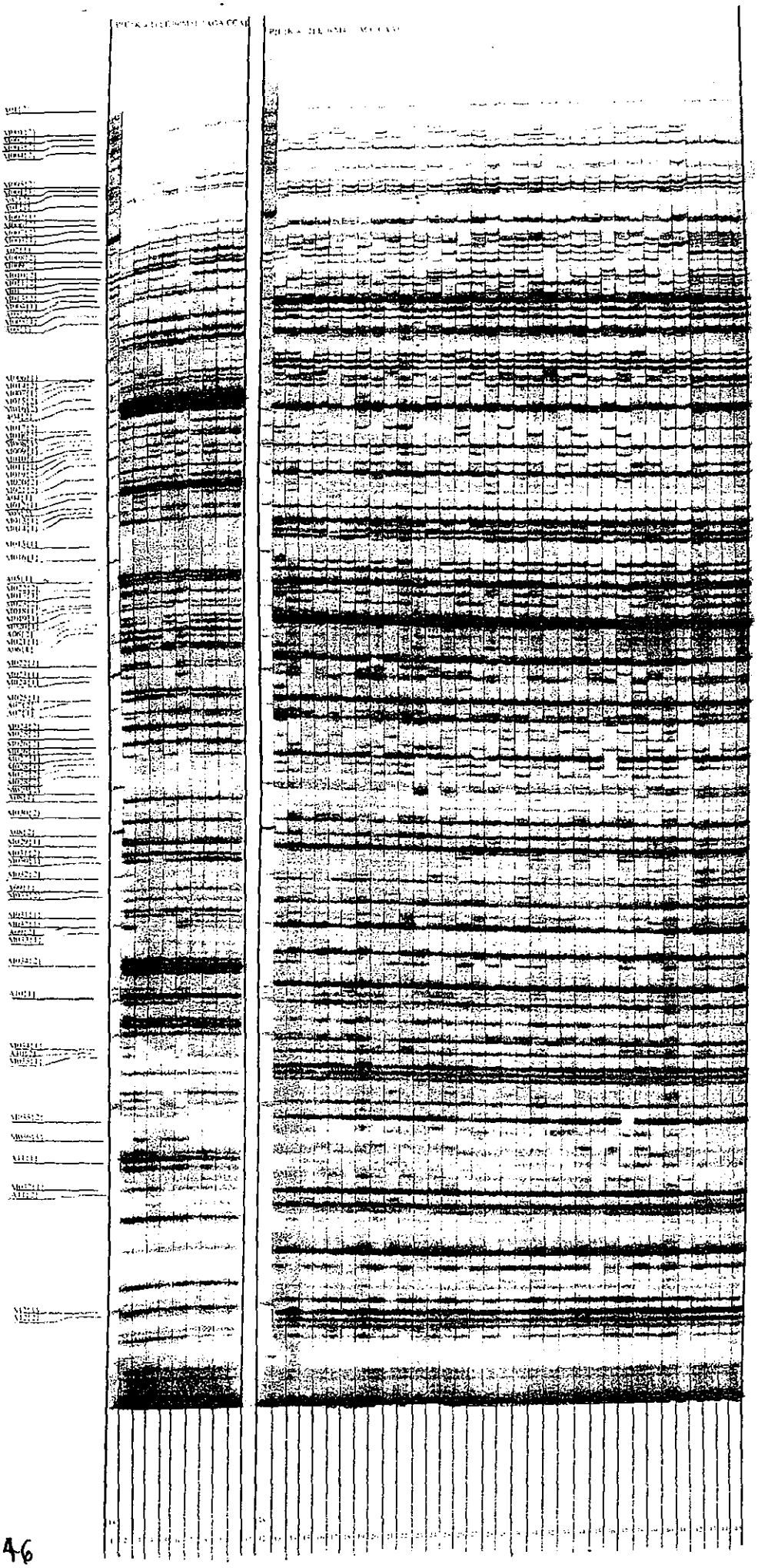

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
GERMICOPA SAS	G86TT278.3	JULIETTE

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	5. TELEPHONE *(Include area code)*	6. FAX *(Include area code)*
Allee Loeiz Herrieu, 1 29334 Quimper Cedex France	33 298 100 100	33 298 100 120
	7. PVPO NUMBER #200100104	

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

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

France 6-29-2007 LMC Per original

10. 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**

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

The breeder, Eric Bonnel, is a Germicopa employee. He is a Research and Development Manager. The ownership of any new breed variety, including Juliette, has been given to Germicopa by contract.

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.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

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

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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)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	TEMPORARY OR EXPERIMENTAL DESIGNATION
GERMICOPA SAS	Allee Loeiz Herrieu, 1 29334 Quimper Cedex France	VARIETY NAME JULIETTE
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	FOR OFFICIAL USE ONLY
Brian C. Cholewa	Quarles & Brady LLP P.O. Box 2113 Madison, WI 53701	PVPO NUMBER #200100104

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.

Brian C. Cholewa
Signature

May 22, 2001
Date

444770

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
POTATO VARIETY JULIETTE
FILED FEBRUARY 6, 2001

STATEMENT REGARDING DEPOSIT

On behalf of the applicant of this application, Germicopa S.A., the applicant does hereby declare that during the pendency of this application for plant variety protection certificate, as requested by the Plant Variety Protection Office, the applicant will deposit a viable sample propagatable material of the above-identified potato variety and will replenish that deposit periodically as needed in a public depository in accordance with regulations established or the requirements of the Plant Variety Protection Office for potato varieties.

Respectfully submitted,

Nicholas J. Seay
Attorney for Applicant
Quarles & Brady LLP
P O Box 2113
Madison, WI 53701-2113
(608)251-5000

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