



TC/52/25

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

TECHNICAL COMMITTEE

**Fifty-Second Session
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PARTIAL REVISION OF THE TEST GUIDELINES FOR SPINACH (DOCUMENT TG/55/7 REV.3)

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1. At its forty-ninth session held in Angers, France, from June 15 to 19, 2015, the Technical Working Party for Vegetables (TWV) considered a partial revision of the Test Guidelines for Spinach on the basis of documents TG/55/7 Rev.3 and TWV/49/26 "Partial Revision of the Test Guidelines for Spinach (Document TG/55/7 Rev.3)" and proposed to revise the Test Guidelines for Spinach as follows (see document TWV/49/32 Rev. "Revised Report", paragraph 105):

- Revision of Characteristic 18 "Resistance to *Peronospora farinosa* f. sp. *spinaciae* (Pfs)":
 - (a) addition of "Race Pfs: 15", including example varieties and to add to TQ 7.3;
 - (b) revision of explanation Ad. 18 in Chapter 8.2 "Explanations for individual characteristics"

2. The changes to Characteristic 18 "Resistance to *Peronospora farinosa* f. sp. *spinaciae* (Pfs)" are presented in highlight and underline (insertion) and ~~strikethrough~~ (deletion).

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
18. (+)	VG Resistance to <u><i>Peronospora farinosa</i></u> f. sp. <i>spinaciae</i> (Pfs)	Résistance à <u><i>Peronospora farinosa</i></u> f. sp. <i>spinaciae</i> (Pfs)	Resistenz gegen <u><i>Peronospora farinosa</i></u> f. sp. <i>spinaciae</i> (Pfs)	Resistencia a <u><i>Peronospora farinosa</i></u> f. sp. <i>spinaciae</i> (Pfs)		
18.1	Race Pfs: 1	Race Pfs: 1	Pathotyp Pfs: 1	Raza Pfs: 1		
QL	absent	absente	fehlend	ausente	Viroflay, Winterreuzen	1
	present	présente	vorhanden	presente	Califlay, Resistoflay	9
18.2	Race Pfs: 2	Race Pfs: 2	Pathotyp Pfs: 2	Raza Pfs: 2		
QL	absent	absente	fehlend	ausente	Califlay	1
	present	présente	vorhanden	presente	Resistoflay	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18.3	Race Pfs: 3	Race Pfs: 3	Pathotyp Pfs: 3	Raza Pfs: 3		
QL	absent	absente	fehlend	ausente	Resistoflay	1
	present	présente	vorhanden	presente	Califlay, Clermont	9

18.4	Race Pfs: 4	Race Pfs: 4	Pathotyp Pfs: 4	Raza Pfs: 4		
QL	absent	absente	fehlend	ausente	Califlay	1
	present	présente	vorhanden	presente	Clermont	9

18.5	Race Pfs: 5	Race Pfs: 5	Pathotyp Pfs: 5	Raza Pfs: 5		
QL	absent	absente	fehlend	ausente	Clermont	1
	present	présente	vorhanden	presente	Califlay, Campania	9

18.6	Race Pfs: 6	Race Pfs: 6	Pathotyp Pfs: 6	Raza Pfs: 6		
QL	absent	absente	fehlend	ausente	Califlay, Campania	1
	present	présente	vorhanden	presente	Boeing	9

18.7	Race Pfs: 7	Race Pfs: 7	Pathotyp Pfs: 7	Raza Pfs: 7		
QL	absent	absente	fehlend	ausente	Califlay	1
	present	présente	vorhanden	presente	Campania	9

18.8	Race Pfs: 8	Race Pfs: 8	Pathotyp Pfs: 8	Raza Pfs: 8		
QL	absent	absente	fehlend	ausente	Boeing, Campania	1
	present	présente	vorhanden	presente	Lazio, Lion	9

18.9	Race Pfs: 10	Race Pfs: 10	Pathotyp Pfs:10	Raza Pfs:10		
QL	absent	absente	fehlend	ausente	Boeing, Campania, Lion	1
	present	présente	vorhanden	presente	Lazio	9

18.10	Race Pfs: 11	Race Pfs: 11	Pathotyp Pfs: 11	Raza Pfs: 11		
QL	absent	absente	fehlend	ausente	Lazio	1
	present	présente	vorhanden	presente	Boeing, Califlay, Campania, Lion	9

18.11	Race Pfs: 12	Race Pfs: 12	Pathotyp Pfs: 12	Raza Pfs: 12		
QL	absent	absente	fehlend	ausente	Boeing, Campania	1
	present	présente	vorhanden	presente	Finch, Pigeon, Red Kitten, Zebu	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18.12	Race Pfs: 13	Race Pfs: 13	Pathotyp Pfs: 13	Raza Pfs: 13		
QL	absent	absente	fehlend	ausente	Campania	1
	present	présente	vorhanden	presente	Boeing, Lion	9

18.13	Race Pfs: 14	Race Pfs: 14	Pathotyp Pfs: 14	Raza Pfs: 14		
QL	absent	absente	fehlend	ausente	Campania, Pigeon	1
	present	présente	vorhanden	presente	Califlay, Lion	9

18.14	Race Pfs: 15	Race Pfs: 15	Pathotyp Pfs: 15	Raza Pfs: 15		
QL	<u>absent</u>	<u>absente</u>	<u>fehlend</u>	<u>ausente</u>	<u>Caladonia</u>	<u>1</u>
	<u>present</u>	<u>présente</u>	<u>vorhanden</u>	<u>presente</u>	<u>Pigeon</u>	<u>9</u>

3. It is proposed to add column Pf: 15 to the table of differential varieties to identify races in Ad. 18 “Resistance to *Peronospora farinosa* f. sp. *spinaciae* (Pfs)” (see yellow highlight):

“Differential varieties to identify races

“Races Pfs: 1-8 and 10-15 of *Peronospora farinosa* f. sp. *spinaciae* are defined with a standard set of ‘differential varieties’ according to the following table:

Differential variety	Pfs: 1	Pfs: 2	Pfs: 3	Pfs: 4	Pfs: 5	Pfs: 6	Pfs: 7	Pfs: 8	Pfs: 10	Pfs: 11	Pfs: 12	Pfs: 13	Pfs:14	Pfs: 15
Viroflay	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Resistoflay	R	R	S	S	S	S	S	S	S	S	S	S	S	S
Califlay	R	S	R	S	R	S	S	R	S	R	R	S	R	S
Clermont	R	R	R	R	S	S	S	S	S	S	S	S	S	R
Campania	R	R	R	R	R	S	R	S	S	R	S	S	S	R
Boeing	R	R	R	R	R	R	R	S	S	R	S	R	S	R
Lion	R	R	R	R	R	R	R	R	S	R	R	R	R	R
Lazio	R	R	R	R	R	R	R	R	R	S	S	S	S	R
Whale	R	R	R	R	R	R	R	R	S	R	R	S	R	S
Pigeon	R	R	R	R	R	R	R	R	R	R	R	R	S	R
Caladonia	R	R	R	R	R	R	R	R	R	R	R	R	R	S

Legend: R= resistance present; S = resistance absent, susceptible”

4. It is proposed to add Race Pfs: 15 to Chapter 10 “Technical Questionnaire”, Section 7.3 (b) (i) as follows:

“7.3 Other information

[...]

“(b) Resistance to pests and diseases (specify)

“(i) Resistance to *Peronospora farinosa* f. sp. *spinaciae*

Race Pfs: 1	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 2	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 3	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 4	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 5	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 6	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 7	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 8	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 10	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 11	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 12	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 13	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 14	<input type="checkbox"/>	absent	<input type="checkbox"/>	present
Race Pfs: 15	<input type="checkbox"/>	absent	<input type="checkbox"/>	present

[...]”

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