

Technical Working Party for Vegetables

TWV/57/19

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PARTIAL REVISION OF THE TEST GUIDELINES FOR TOMATO ROOTSTOCKS

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1. The purpose of this document is to present a proposal for a partial revision of the Test Guidelines for Tomato Rootstocks (document TG/294/1 Corr. Rev. 4) for inclusion of characteristics from the Table of Characteristics in the Technical Questionnaire.
2. The background to the proposed partial revision of the Test Guidelines for Tomato Rootstocks is presented in document TWP/7/6 "Revision of Test Guidelines".
3. The TWV is invited to consider the inclusion of the following characteristics in the TQ (characteristics for inclusion indicated in highlight and underline):

Char. No.	(*)	Characteristic Name	
2		<u>Plant: height</u>	
8	(*)	<u>Leaf: intensity of green color</u>	
11	(*)	Fruit: green shoulder	Check whether to add option "not applicable" (char. 16 state 1 "not developed or very small")
14		<u>Fruit: conspicuousness of meridian stripes</u>	Check whether to add option "not applicable" (char. 16 state 1 "not developed or very small")
16	(*)	<u>Fruit: size</u>	
17	(*)	Fruit: shape in longitudinal section	Check whether to add option "not applicable" (char. 16 state 1 "not developed or very small")
18	(*)	Fruit: number of locules	Check whether to add option "not applicable" (char. 16 state 1 "not developed or very small")
19	(*)	Fruit: color at maturity	Check whether to add option "not applicable" (char. 16 state 1 "not developed or very small")
21	(*)	<u>Autonecrosis</u>	
22	(*)	Resistance to <i>Meloidogyne incognita</i> (Mi)	
23		Resistance to <i>Verticillium</i> sp. (Va and Vd) – Race 0	
24.1		Resistance to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol) – Race 0EU/1US	
24.2		Resistance to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol)– Race 1EU/2US	

- 24.3 (*) Resistance to *Fusarium oxysporum* f. sp. *lycopersici* (Fol)– Race 2EU/3US
- 25 (*) Resistance to *Fusarium oxysporum* f. sp. *radicis-lycopersici* (Forl)
- 26.1 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Race 0
- 26.2 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Group A
- 26.3 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Group B
- 26.4 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Group C
- 26.5 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Group D
- 26.6 Resistance to *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) – Group E
- 27.1 Resistance to Tomato mosaic virus (ToMV) – Strain 0
- 27.2 Resistance to Tomato mosaic virus (ToMV) – Strain 1
- 27.3 Resistance to Tomato mosaic virus (ToMV) – Strain 2
- 28 Resistance to *Pyrenochaeta lycopersici* (Pl)
- 29 Resistance to *Stemphylium* spp. (Ss)
- 30 Resistance to Tomato yellow leaf curl virus (TYLCV)
- 31 Resistance to Tomato spotted wilt virus (TSWV)
- 32 Resistance to *Oidium neolycopersici* (On)

4. The proposed additions to TQ 5 are presented in highlight and underline.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
5.1 (2) <u>Plant: height</u>		
<u>very short</u>		1[]
<u>very short to short</u>		2[]
<u>short</u>	<u>Big Power</u>	3[]
<u>short to medium</u>		4[]
<u>medium</u>	<u>Maxifort</u>	5[]
<u>medium to tall</u>		6[]
<u>tall</u>	<u>Beaufort</u>	7[]
<u>tall to very tall</u>		8[]
<u>very tall</u>		9[]
5.2 (8) <u>Leaf: intensity of green color</u>		
<u>very light</u>		1[]
<u>very light to light</u>		2[]
<u>light</u>		3[]
<u>light to medium</u>		4[]
<u>medium</u>		5[]
<u>medium to dark</u>		6[]
<u>dark</u>	<u>Maxifort</u>	7[]
<u>dark to very dark</u>		8[]
<u>very dark</u>		9[]
5.3 (11) <u>Fruit: green shoulder</u>		
absent		1[]
present	<u>Big Force, Maxifort</u>	9[]

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note	
5.4 (14)	Fruit: conspicuousness of meridian stripes		
<u>very weak</u>	<u>He Wolf</u>	<u>1[]</u>	
<u>weak</u>	<u>Popeye</u>	<u>2[]</u>	
<u>medium</u>	<u>Body</u>	<u>3[]</u>	
<u>strong</u>	<u>Vigomax</u>	<u>4[]</u>	
<u>very strong</u>		<u>5[]</u>	
5.5 (16)	Fruit: size		
<u>not developed or very small</u>	<u>RT303</u>	<u>1[]</u>	
<u>very small to small</u>		<u>2[]</u>	
<u>small</u>	<u>Body, Optifort</u>	<u>3[]</u>	
<u>small to medium</u>		<u>4[]</u>	
<u>medium</u>	<u>Emperador</u>	<u>5[]</u>	
<u>medium to large</u>		<u>6[]</u>	
<u>large</u>	<u>Titron</u>	<u>7[]</u>	
<u>large to very large</u>		<u>8[]</u>	
<u>very large</u>		<u>9[]</u>	
5.6 (17)	Fruit: shape in longitudinal section		
<u>broad oblate</u>	<u>He-Wolf</u>	<u>1[]</u>	
<u>narrow oblate</u>	<u>Gladiator</u>	<u>2[]</u>	
<u>circular</u>	<u>Maxifort</u>	<u>3[]</u>	
<u>obovate</u>		<u>4[]</u>	
5.7 (18)	Fruit: number of locules		
<u>only two</u>	<u>Maxifort</u>	<u>1[]</u>	
<u>two and three</u>		<u>2[]</u>	
5.8 (19)	Fruit: color at maturity		
<u>green</u>	<u>Big Force</u>	<u>1[]</u>	
<u>yellowish</u>	<u>Vigomax</u>	<u>2[]</u>	
<u>orangish</u>	<u>Titron</u>	<u>3[]</u>	
<u>reddish</u>	<u>Brigeor</u>	<u>4[]</u>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note
5.9 Autonecrosis (21)		
absent	Maxifort	1[]
present	Body	9[]
5.10 Resistance to <i>Meloidogyne incognita</i> (Mi) (22)		
susceptible	Bruce	1[]
moderately resistant		2[]
highly resistant	Emperador	3[]
5.11 Resistance to <i>Verticillium</i> sp. (Va and Vd) - Race 0 (23)		
absent		1[]
present	Bruce, Emperador, King Kong	9[]
not tested		[]
5.12 Resistance to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol) - Race 0EU/1US (24.1)		
absent		1[]
present	Emperador	9[]
not tested		[]
5.13 Resistance to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol) - Race 1EU/2US (24.2)		
absent		1[]
present	Emperador	9[]
not tested		[]
5.14 Resistance to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol) - Race 2EU/3US (24.3)		
absent	Emperador	1[]
present	Colosus	9[]
5.15 Resistance to <i>Fusarium oxysporum</i> f. sp. <i>radicis-lycopersici</i> (Forl) (25)		
absent	Kemerit	1[]
present	Emperador	9[]

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note	
5.16 (26.1)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Race 0		
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.17 (26.2)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group A		
absent	King Kong	1[]	
present	Vitalfort	9[]	
not tested		[]	
5.18 (26.3)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group B		
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.19 (26.4)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group C		
absent		1[]	
present	Vitalfort	9[]	
not tested		[]	
5.20 (26.5)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group D		
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.21 (26.6)	Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group E		
absent	Bruce, King Kong	1[]	
present	Vitalfort	9[]	
not tested		[]	
5.22 (27.1)	Resistance to Tomato mosaic virus (ToMV) – Strain 0		
absent		1[]	
present	Emperador	9[]	
not tested		[]	

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics		Example Varieties	Note
5.23 (27.2)	Resistance to Tomato mosaic virus (ToMV) – Strain 1		
	absent		1[]
	present	Emperador	9[]
	not tested		[]
5.24 (27.3)	Resistance to Tomato mosaic virus (ToMV) – Strain 2		
	absent		1[]
	present	Emperador	9[]
	not tested		[]
5.25 (28)	Resistance to <i>Pyrenochaeta lycopersici</i> (PI)		
	absent		1[]
	present	Emperador	9[]
	not tested		[]
5.26 (29)	Resistance to <i>Stemphylium</i> spp. (Ss)		
	absent	Big Power	1[]
	present	Body	9[]
	not tested		[]
5.27 (30)	Resistance to Tomato yellow leaf curl virus (TYLCV)		
	absent	Big Power	1[]
	present		9[]
	not tested		[]
5.28 (31)	Resistance to Tomato spotted wilt virus (TSWV)		
	absent	Emperador	1[]
	present	Enpower	9[]
	not tested		[]
5.29 (32)	Resistance to <i>Oidium neolycopersici</i> (On)		
	absent		1[]
	present	Multifort	9[]
	not tested		[]

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