

Technical Committee

TC/59/27

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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 Technical Working Party for Vegetables (TWV), at its fifty-seventh session¹, considered document TWV/57/19 “Partial revision of the Test Guidelines for Tomato Rootstocks” and agreed to propose the inclusion of the following characteristics in the TQ (characteristics for inclusion indicated in highlight and underline) (see document TWV/57/26 “Report”, paragraph 75):

Char. No.	(*)	Characteristic Name
2		<u>Plant: height</u>
8	(*)	<u>Leaf: intensity of green color</u>
11	(*)	Fruit: green shoulder
14		<u>Fruit: conspicuousness of meridian stripes</u>
16	(*)	<u>Fruit: size</u>
17	(*)	Fruit: shape in longitudinal section
18	(*)	Fruit: number of locules
19	(*)	Fruit: color at maturity
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 <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> (Fol)– Race 2EU/3US
25	(*)	Resistance to <i>Fusarium oxysporum</i> f. sp. <i>radicis-lycopersici</i> (Forl)
26.1		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Race 0
26.2		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group A
26.3		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group B
26.4		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group C
26.5		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group D
26.6		Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – 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 <i>Pyrenochaeta lycopersici</i> (PI)
29		Resistance to <i>Stemphylium</i> spp. (Ss)
30		Resistance to Tomato yellow leaf curl virus (TYLCV)
31		Resistance to Tomato spotted wilt virus (TSWV)
32		Resistance to <i>Oidium neolycopersici</i> (On)

¹ held in Antalya, Türkiye, from May 1 to 5, 2023

3. The proposed additions to TQ 5 are presented in highlight and underline (in English only).

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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	Big Force, Maxifort	9[]

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Characteristics	Example Varieties	Note
5.4 (14) Fruit: conspicuousness of meridian stripes <u>very weak</u> <u>weak</u> <u>medium</u> <u>strong</u> <u>very strong</u>	<u>He Wolf</u> <u>Popeye</u> <u>Body</u> <u>Vigomax</u>	<u>1[]</u> <u>2[]</u> <u>3[]</u> <u>4[]</u> <u>5[]</u>
5.5 (16) Fruit: size <u>not developed or very small</u> <u>very small to small</u> <u>small</u> <u>small to medium</u> <u>medium</u> <u>medium to large</u> <u>large</u> <u>large to very large</u> <u>very large</u>	<u>RT303</u> <u>Body, Optifort</u> <u>Emperador</u> <u>Titron</u>	<u>1[]</u> <u>2[]</u> <u>3[]</u> <u>4[]</u> <u>5[]</u> <u>6[]</u> <u>7[]</u> <u>8[]</u> <u>9[]</u>
5.6 (17) Fruit: shape in longitudinal section <u>broad oblate</u> <u>narrow oblate</u> <u>circular</u> <u>obovate</u>	<u>He-Wolf</u> <u>Gladiator</u> <u>Maxifort</u>	<u>1[]</u> <u>2[]</u> <u>3[]</u> <u>4[]</u>
5.7 (18) Fruit: number of locules <u>only two</u> <u>two and three</u>	<u>Maxifort</u>	<u>1[]</u> <u>2[]</u>
5.8 (19) Fruit: color at maturity <u>green</u> <u>yellowish</u> <u>orangish</u> <u>reddish</u>	<u>Big Force</u> <u>Vigomax</u> <u>Titron</u> <u>Brigeor</u>	<u>1[]</u> <u>2[]</u> <u>3[]</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 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Race 0 (26.1)			
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.17 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group A (26.2)			
absent	King Kong	1[]	
present	Vitalfort	9[]	
not tested		[]	
5.18 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group B (26.3)			
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.19 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group C (26.4)			
absent		1[]	
present	Vitalfort	9[]	
not tested		[]	
5.20 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group D (26.5)			
absent	King Kong	1[]	
present	Bruce	9[]	
not tested		[]	
5.21 Resistance to <i>Passalora fulva</i> (Pf) (ex <i>Fulvia fulva</i>) – Group E (26.6)			
absent	Bruce, King Kong	1[]	
present	Vitalfort	9[]	
not tested		[]	
5.22 Resistance to Tomato mosaic virus (ToMV) – Strain 0 (27.1)			
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		[]