UPOV
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Enlarged Editorial Committee

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MATTERS TO BE RESOLVED CONCERNING TEST GUIDELINES CONSIDERED BY THE ENLARGED EDITORIAL COMMITTEE IN MARCH: TOMATO ROOTSTOCKS (PARTIAL REVISION)

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1. The Enlarged Editorial Committee (TC-EDC), at its meeting held in Geneva, on March 26 and 27, 2018, considered document TC-EDC/MAR18/9 "Partial revision of the Test Guidelines for Tomato Rootstocks" and agreed that the technical issues raised be addressed by the Technical Working Party for Vegetables (TWV) (see document TC-ECD/MAR18/11 "Report", paragraph 57).

2. The TWV, at its fifty-second session, held in Beijing, China, from September 17 to 21, 2018, considered documents TWV/52/12 "Matters to be resolved concerning Test Guidelines adopted by the Technical Committee: Tomato Rootstocks" and TWV/52/19 "Addendum to Matters to be resolved concerning Test Guidelines adopted by the Technical Committee: partial revision of the Test Guidelines for Tomato and Tomato Rootstocks".

3. The TWV agreed that Characteristic and Ad. 24 "Resistance to *Fusarium oxysporum* f. sp. *lycopersici* (Fol)" be excluded from the partial revision as research was still ongoing. The TWV agreed that the characteristic should be reconsidered at its fifty-third session (see document TWV/52/20 "Report", paragraph 66).

4. The TWV further agreed the following (see document TWV/52/20 "Report", paragraph 67):

Chars. 27, 31	- to be kept as VG (VS not appropriate for DNA marker test, see TGP/9. In case of DNA markers, 20 plants are observed for uniformity. According to chapter 4.1.4 of TG/44/11 Rev., indication of VS is not appropriate.) *TWV: agreed* - DNA marker test to be presented to the BMT to check whether method corresponds to TGP/15 *Leading Expert: I will participate in the BMT and the item will be discussed. I will report to the TWV accordingly* *The TWV noted that the method corresponds to TGP/15 and that document TGP/15 would be revised to include a relevant example*

Ads. 27, 31 (Ad. 24 was deleted- see paragraph 66 of this document)	to clarify "often" (does not meet requirements for use of gene-specific marker model) (e.g. in Ad. 24 (ii) to confirm whether under (ii) DNA marker test there are always resistance alleles present in Gene I2 to both race 0 (ex 1) and race 1 (ex 2).) *Leading Expert:* *Ad. 27 (ii)* *To read "Resistance gene Tm2 gives resistance to ToMV. Gene Tm2 has two dominant resistance alleles: resistance allele Tm2 is always associated with resistance to strain 0 and 1, resistance allele Tm2² is always associated with resistance to strain 0, 1 and 2. The presence or absence of both resistance alleles can be detected by the co-dominant markers as described in Arens, P. et al (2010). Specific aspects: "* *Ad. 31 (ii)* *To read "Dominant resistance gene Sw-5 is always associated with resistance to TSWV strain 0. The presence or absence of the resistance allele can be detected by the co-dominant marker as described in Dianese, E.C. et al (2010). Specific aspects: "* *TWV: agreed*
Ad. 24 (ii) 4.2	to check whether to add control varieties as example varieties in the table of characteristics *Leading Expert: agreed* *In order to be coherent, Ad. 27 (ii) 4.2 and Ad. 31 (ii) 4.2 should be modified as follows:* *Ad. 27 (ii) 4.2* *homozygous allele for susceptibility tm2 present: (Solanum lycopersicum) Moneymaker* *homozygous allele for resistance Tm2 present: (Solanum lycopersicum) Moperou* *homozygous allele for resistance Tm2² present: Emperador* *27.1 strain 0, example varieties* *absent [1]* *present [9] Emperador* *27.2 strain 1, example varieties* *absent [1]* *present [9] Emperador* *27.3 strain 2, example varieties* *absent [1]* *present [9] Emperador* *Ad. 31 (ii) 4.2* *homozygous allele 1 for susceptibility present: Emperador* *homozygous allele 2 for susceptibility present: (Solanum lycopersicum) Mountain Magic* *homozygous allele for resistance present: Enpower* *31, example varieties* *absent [1] Emperador* *present [9] Enpower* *(Explanation: Big Power is not available anymore)* *TWV: agreed*
Ad. 27 (i), 4. Footnotes	to indicate e-mail and web address of the institutions instead of personal e-mail addresses *Leading Expert: to use matref@geves.fr and resistencias@inia.es* *TWV: agreed*
Ad. 27 (ii)	Arens, P. *et al* (2010) to be added to 9. Literature *TWV: agreed*
Ad. 27 (ii) 3.2	to read "Assay 2 to check ~~susceptible or resistance~~ allele for susceptibility or resistance" *TWV: agreed*
Ad. 27 (ii) 4.2	Are the control varieties homozygous for Tm2 and Tm2ß? *Leading Expert: See the updated lists of control varieties and example varieties* *TWV: agreed.*
Ad. 27 (ii) 8.	to read "In case the DNA marker test result does not confirm the declaration in the TQ, a bio-assay should be performed to observe whether ~~the resistance is absent or present for~~ the variety is resistant ~~(~~on another mechanism like gene Tm1~~)~~." *TWV: agreed*
Ad. 27 (ii)	Table on test results (below 8.): to delete "~~(occurs incidentally)~~" *TWV: agreed*

Ad. 30 (i)	in footnotes 10, 11: to check whether to read "IHSM-UMA-CSIC" *Leading Expert: For both footnote 10 and 11 it is to read "IHSM-UMA-CSIC" (mentioned e-mailaddresses are correct)* *TWV: agreed*
Ad. 30 (i) (8.5)	to check wording of disclaimer. The use of a GMO as part of requirements for DUS examination must be worded according to internationally accepted terminology/Conventions concerning the transboundary movement of Living Modified Organisms and release of GMOs. Should be worded by relevant experts with experience implementing international regulations. *Leading Expert: proposal for the disclaimer to read "The transformed Agrobacterium tumefaciens is a living modified organism (LMO; or genetically modified organism (GMO)) and in many countries it requires to comply with Cartagena Protocol on Biosafety in case of transboundary movement, transit, handling and use that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health."* *To change OGM at 9.5 and 9.9 into LMO/GMO.* *TWV: agreed*
Ad. 31	to add explanation below title of Ad. 31 to read the same as other Ad. *Leading Expert: "Resistance to be tested in a bio-assay (method i) or in a DNA marker test (method ii), if appropriate."* *TWV: agreed*
Ad. 31 (ii)	Dianese, E.C. et al (2010) to be added to 9. Literature *TWV: agreed*
Ad. 31 (ii) 3.	to read "~~Susceptible allele~~ Allele for susceptibility ~~Resistant allele~~ Allele for resistance" *TWV: agreed*
Ad. 31 (ii) 8.	to read "homozygous ~~susceptible~~ susceptibility allele 1 present homozygous ~~susceptible~~ susceptibility allele 2 present homozygous ~~resistant~~ resistance allele present:" *TWV: agreed*
Ad. 31 (ii) 8.	to read "In case the DNA marker test result does not confirm the declaration in the TQ, a bio-assay should be performed to observe whether the resistance is absent or present for the variety is resistant on another mechanism." *TWV: agreed*

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