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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
GENEVA

**TECHNICAL WORKING PARTY FOR FRUIT CROPS**

**Fortieth Session  
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**PROPOSAL FOR A PARTIAL REVISION OF THE TEST GUIDELINES FOR  
MANDARIN (CITRUS GROUP 1)**

*Document prepared by an expert from Spain*

1. The Test Guidelines for Mandarin (document TG/201/1) were adopted in 2003. However, there have been applications for new types of mandarin varieties which are not adequately covered by the current Test Guidelines. To address those new types, it is proposed that there be a partial revision of the Test Guidelines in order to update characteristic 25 “Anther: viable pollen”, and to add a new characteristic.
2. At present, characteristic 25 “Anther: percentage of viable pollen” has two states of expression, “absent” or “present”. Differences observed in the pollen germination percentage cannot be reflected with only two states. This characteristic supposes one of the main targets in the new international improvement programs in citrus fruits. It is proposed that the states “absent” or “present” be substituted by a more detailed classification.
3. Given the use of the new methods to obtain new citrus varieties and as a consequence of the new applications for varieties with reduced fertility, it is necessary to introduce a new characteristic to evaluate the ovule fertility by cross-pollination with another variety or species. This method avoids the presence of seeds in certain new, irradiated varieties and in existing varieties on the market.

4. Therefore, it is proposed to make the following update to the Test Guidelines:

*Chapter VII. Table of Characteristics*

Current wording

25.	Anther: viable pollen	Anthère: pollen viable	Anthere: keim-fähiger Pollen	Antera: polen viable		
QL [239]	(b) absent present	absent présent	fehlend vorhanden	ausente presente	Owari (SAT)	1 9

Proposed new wording

25.	Anther: viable pollen	Anthère: pollen viable	Anthere: keim-fähiger Pollen	Antera: polen viable		
QN [239]	(b) absent or very low low medium high very high	absent ou très faible faible moyen élevé très élevé	fehlend oder sehr gering gering mittel hoch sehr hoch	ausente o muy bajo bajo medio alto muy alto	Owari (SAT) Marisol (CLE) Fortune (HMA)	1 3 5 7 9

Proposed new characteristic

NEW (after 98.)	Fruit: number of seeds (controlled manual cross-pollination)	Fruit: nombre de pépins (allogamie manuelle contrôlée)	Frucht: Anzahl Samen (manuelle kontrollierte Fremdbe-fruchtung)	Fruto: número de semillas (alógama manual controlada)		
QN [325]	(c) absent or very few few medium many very many	absents ou très peu nombreux peu nombreux moyen nombreux très nombreux	fehlend oder sehr gering gering mittel groß sehr groß	ausentes o muy bajo bajo medio alto muy alto	Nulessin (CLE), Tango (HMA) Marisol (CLE) Clemenules (CLE)	1 3 5 7 9

5. The changes to the Test Guidelines for Mandarin would also need to be reflected in the overall Table of Characteristics (Annex to TG/83/4, TG/201/1, TG/202/1, TG/203/1, TG/204/1):

Group/Groupe/Gruppe/Grupo					English	français	deutsch	español	Note/Nota
1	2	3	4	5					
239.	25	26	29	30	37	Anther: viable pollen	Anthère: pollen viable	Anthere: keim-fähiger Pollen	Antera: polen viable
QL						absent present	absent présent	fehlend vorhanden	ausente presente