



TWF/45/23  
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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
 Geneva

**TECHNICAL WORKING PARTY FOR FRUIT CROPS**

**Forty-Fifth Session**  
**Marrakesh, Morocco, May 26 to 30, 2014**

REVISION OF DOCUMENT TGP/14: SECTION 2.4: APEX/TIP SHAPE CHARACTERISTICS

*Document prepared by the Office of the Union*

*Disclaimer: this document does not represent UPOV policies or guidance*

1. The purpose of this document is to present a proposal for revision of document TGP/14 "Glossary of terms used in UPOV documents" to provide further guidance in Section 2.4: "Apex/tip shape characteristics".

2. The following abbreviations are used in this document:

CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TC-EDC:	Enlarged Editorial Committee
TWA:	Technical Working Party for Agricultural Crops
TWC:	Technical Working Party on Automation and Computer Programs
TWF:	Technical Working Party for Fruit Crops
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
TWPs:	Technical Working Parties

3. The structure of this document is as follows:

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EXAMPLES FROM DRAFTS AND TEST GUIDELINES .....	2
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ANNEX I: SUMMARY OF DOCUMENT TGP/14: SECTION 2: SUBSECTION 2.4: "APEX/TIP SHAPE CHARACTERISTICS"

ANNEX II: EXAMPLES FROM DRAFTS AND TEST GUIDELINES

**BACKGROUND**

4. The Technical Committee (TC) at its fiftieth session held in Geneva, from April 7 to 9, 2014, requested the Office of the Union to develop an explanation that it may be possible in some cases for an apex characteristic to include a state of expression based on a differentiated tip, for consideration by the TWPs at their sessions in 2014 (see document TC/50/36 "Report on the Conclusions", paragraph 73).

5. Document TGP/14 "Glossary of Terms used in UPOV Documents" currently provides guidance on apex and tip shape characteristics, which is presented in Annex I to this document.

## EXAMPLES FROM DRAFTS AND TEST GUIDELINES

6. Annex II to this document presents some examples from adopted and draft Test Guidelines of shape of apex characteristics that include a state of expression based on a differentiated tip.

## PROPOSAL

7. It is proposed to amend guidance in document TGP/14, Section 2.4: "Apex/tip shape characteristics" to include the explanation as follows:

"In some cases it may be possible for a characteristic "shape of apex" (PQ characteristic) to include a state of expression based on a differentiated tip. In such cases it is necessary to provide clarity on the appropriate choice of state of expression, because all varieties with a differentiated tip will also have a general apex shape (excluding the tip) that corresponds to one of the other states of expression. For example, the explanation might clarify that the general apex shape is only considered if there is no differentiated tip e.g.:

"Leaf: shape of apex (PQ Characteristic)



1  
acuminate tip



2  
acute  
(no acuminate tip)



3  
rounded  
(no acuminate tip)"

8. *The TWF is invited to consider the proposal to develop an explanation on the inclusion of a state of expression based on a differentiated tip in shape of apex characteristics.*

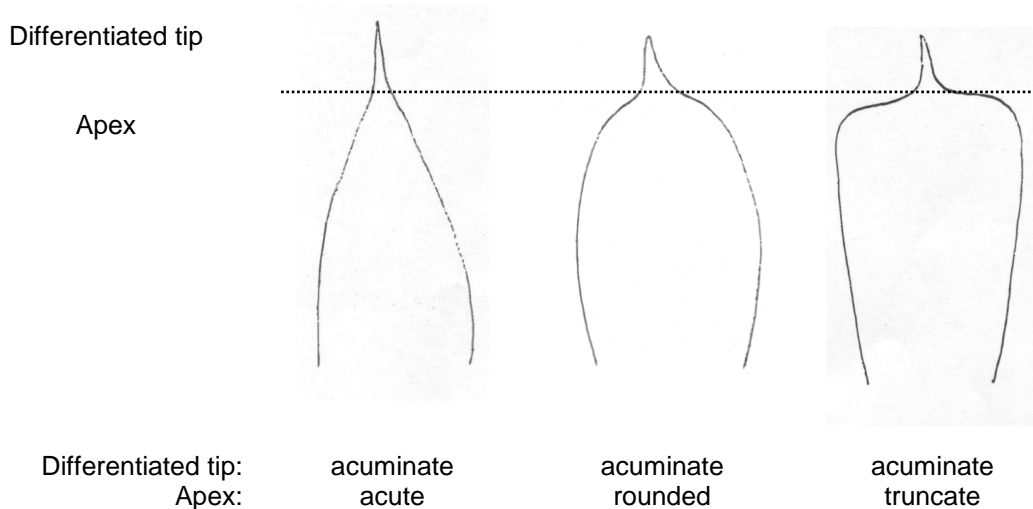
[Annexes follow]

## EXTRACTS FROM DOCUMENT TGP/14: SECTION 2: SUBSECTION 2.4: "APEX/TIP SHAPE CHARACTERISTICS"

*"2.4 Apex/Tip Shape Characteristics"*

[...]

"2.4.2 In some cases, the distal extremity of the apex may be differentiated into a "TIP". In such cases, the shape of the apex is taken as the general shape, excluding any differentiated tip (if present). For example:



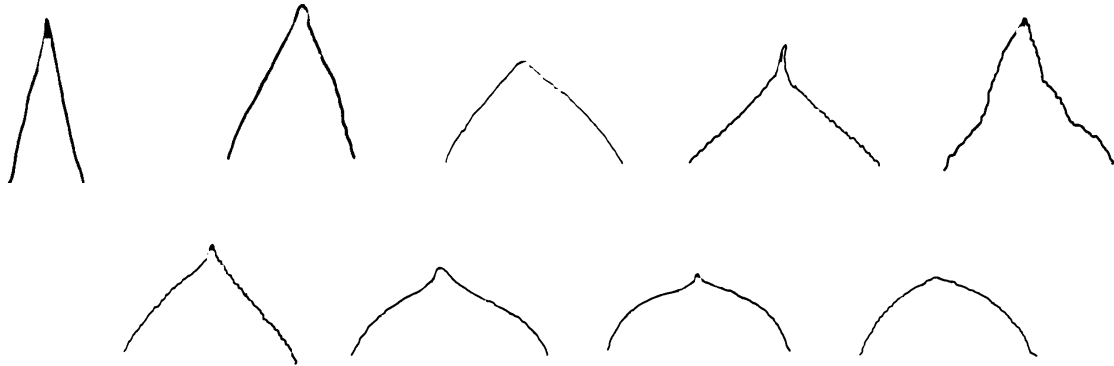
[...]

"2.4.5 In cases where the tip is differentiated within the general shape of the apex, characteristics concerning the shape of the tip may be developed independently from those concerning the general shape of the apex. Different combinations between these two categories are possible, for example: a first characteristic for the general shape of the apex (e.g. acute, obtuse, rounded), together with a second characteristic for emargination at apex (absent, present), or apiculate tip (absent, present).

"2.4.6 In the case of tip shapes, it may be more appropriate to have a simple characteristic such as length of tip, rather than using botanical terms. The only difference between mucronate and aristate is the length of the 'tip', the only difference between cuspidate and pungent is the length of the 'tip', and the only difference between emarginate and retuse is the angle and depth of the notch. These pairs can therefore also be quantified where applicable, by stating, for example, 'length of tip' or 'depth of notch', instead of using the specific botanical terms.

“Example

“the variation between the range of apex shapes indicated by the illustrations below



“Possible characteristic(s)

‘Alternative 1






- “(a) angle of apex (excluding tip, if present) (QN):  
e.g. *strongly acute (1)*; *moderately acute (2)*; *right-angle (3)*; *moderately obtuse (4)*;  
*strongly obtuse (5)*
- “(b) length of acuminate tip (QN):  
e.g. *absent or short (1)*; *medium (2)*; *long (3)*

“Alternative 2




“(a) angle of apex (excluding tip, if present) (QN):  
e.g. *strongly acute* (1); *moderately acute* (2); *right-angle* (3); *moderately obtuse* (4);  
*strongly obtuse* (5)

“(b) tip (PQ): *absent or very weak* (1); *mucronate* (2); *narrow short acuminate* (3); *broad short acuminate* (4); *narrow long acuminate* (5); *broad long acuminate* (6)

“with the following illustration:

		← length of tip →			
		absent or very weak	short	medium	long
↑ width of tip	narrow	[see below]	 2 mucronate	 3 narrow short acuminate	 5 narrow long acuminate
	broad		 4 broad short acuminate	 6 broad long acuminate	
←					

“examples of tip: absent or very weak (1) with different angles of apex (characteristic (a)):

		
strongly acute apex	right-angle apex	obtuse apex

[Annex II follows]

EXAMPLES FROM DRAFTS AND TEST GUIDELINES

Document TG/SALVI(proj.2) Salvia

Ad. 12: Leaf blade: shape of apex



1  
acuminate



2  
acute



3  
obtuse



4  
rounded

Document TG/25/9(proj.7) Carnation

Ad. 25: Epicalyx: apex of outer lobes

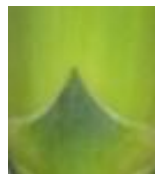
Ad. 27: Epicalyx: apex of inner lobes



1  
acute



2  
acute to  
acuminate



3  
acuminate

Ad. 35: Calyx: shape of apex of lobe



1  
acute



2  
intermediate



3  
acuminate

Document TG/CAMPA(proj.4) Campanula

Ad. 10: Leaf blade: shape of apex



1  
acuminate



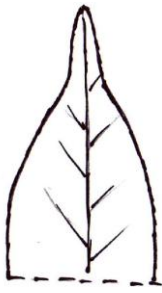
2  
acute



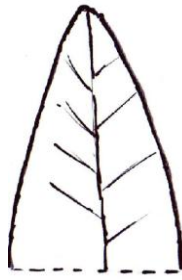
3  
obtuse

Document TG/MANDE(proj.7) Mandevilla

Ad. 16: Leaf blade: shape of apex



1  
acuminate



2  
acute



3  
rounded

Document TG/212/2(proj.1) Petunia

Ad. 31: Corolla lobe: shape of apex



1  
cuspidate



2  
rounded



3  
truncate



4  
emarginate

Document TG/ZINNIA(proj.4) Zinnia

Ad. 26: Ray floret: shape of the apex



1  
truncate



2  
rounded



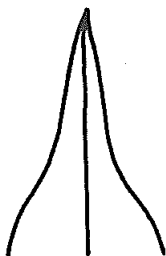
3  
mucronate



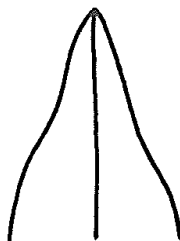
4  
emarginated

Document TG/124/4(proj.1) Chestnut

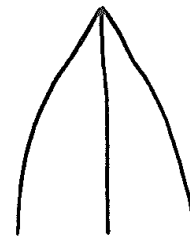
Ad. 23: Leaf: shape of apex



1  
attenuate-acuminate



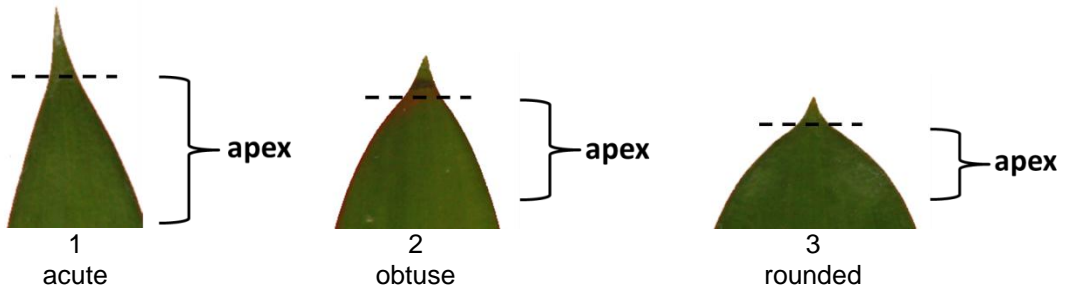
2  
acuminate



3  
acute

Document TG/VANIL(proj.5) Vanilla

Ad. 9: Leaf: shape of apex



[End of Annex II and of document]