



TWC/28/17

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

**TECHNICAL WORKING PARTY ON AUTOMATION AND  
COMPUTER PROGRAMS**

**Twenty-Eighth Session**  
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**GUIDANCE FOR METHOD OF OBSERVATION  
(REVISION OF DOCUMENT TGP/7)**

*Document prepared by the Office of the Union*

1. The Technical Committee (TC), at its forty-sixth session, held in Geneva from March 22 to 24, 2010 agreed that, in a future revision of TGP/7 (document TGP/7/3), consideration should be given to providing guidance on the indication of observation by Measurement (M) for characteristics such as dates (e.g. time of flowering) and counts (e.g. number of leaf lobes).

**BACKGROUND**

Document TGP/9 “Examining Distinctness” explains the following with regard to method of observation:

**“4.2 Method of observation (visual or measurement)**

“The expression of characteristics can be observed visually (V) or by measurement (M).

**“4.2.1 Visual observation (V)**

**“4.2.1.1** “Visual” observation (V) is an observation made on the basis of the expert’s judgement. For the purposes of this document, “visual” observation refers to the sensory

observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts).

[...]

#### 4.2.2 Measurement (M)

Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

- The following examples are intended to illustrate the ways of considering the method of observation for characteristics such as time of flowering and counts.

#### Example 1: Time of Flowering

<b>Time of flowering</b>		
<b>QN</b>	early	3
	medium	5
	late	7

*Scenario A (Explanation: the time of flowering is when 50% of plants have emitted the stigma in the main panicle)*

- The DUS trial is visited on various dates to assess whether each variety has reached the time of flowering. The assessment of whether 50% of plants have emitted the stigma in the main panicle is made by counting the number of plants that have emitted their stigmas to determine the percentage, or by an overall assessment of the percentage.

- In this case, the method of observation would be measurement (M), because the determination of the state of expression will be according to the date (= measurement on a time scale) at which a variety was found to have reached the time of flowering. A date is recorded for each variety, which is transformed into notes after assessment of all varieties.

*Scenario B (Explanation: the time of flowering is assessed on a single visit)*

- The DUS trial is visited on one or more occasions to assess the time of flowering by reference to example varieties.

- In this scenario, the time of flowering is a visual (V) observation because an overall visual observation is made as to the time of flowering for a particular variety by reference to the state of flowering of example varieties, without reference to a date of visit. A note is recorded for each variety in relation to the variation between varieties (e.g. early, medium, late).

Example 2: Number of Leaf Lobes

<b>Leaf blade: number of lobes</b>	
none	1
three	2
five	3
seven	4

7. The number of lobes is observed by an overall observation, i.e. it is not necessary to “consciously” count the number of lobes, because the numbers are very small. However, because the characteristic relates to a number, it should be indicated as a measurement (M).

**COMMENTS OF THE TECHNICAL WORKING PARTIES**

8. At its thirty-ninth session, held in Osijek, Croatia, from May 24 to 28, 2010, the Technical Working Party for Agricultural Crops (TWA) considered document TWA/39/17 (see document TWA/39/27 “Report”, paragraphs 53 and 54). The TWA concluded that the important difference between Scenario A and B in Example 1 (above) was that, in Scenario B, the assessment was made by reference to example varieties, instead of recording the date and suggested that the document be modified to clarify that. Paragraphs 5 and 6 of this document have been modified in that regard, compared to document TWA/39/17.

9. The TWA also agreed that the guidance on this matter should be consistent with the recommendations provided in document TGP/8, in particular in section “Data to be recorded”, to be developed for a future revision of TGP/8 - PART I.

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