



TG/44/11 Rev.
ORIGINAL: English

**DATE**: 2011-10-20 + 2013-03-20

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

#### **TOMATO**

UPOV Code: SOLAN\_LYC Solanum lycopersicum L.

#### **GUIDELINES**

#### FOR THE CONDUCT OF TESTS

#### FOR DISTINCTNESS, UNIFORMITY AND STABILITY

#### Ad. 2: Plant: growth type

### Determinate (1):

This type produces a fix number of trusses on each stem. The number of trusses is different among varieties (Note: can be influenced by agro climatic conditions). In this type, the number of leaves or internodes between inflorescence is irregular within a plant and varies from one to three. The stem ends with an inflorescence and no lateral shoots are produced.

This type also includes some so-called "semi-determinate" varieties which do not have consistently three leaves or internodes between inflorescences, and show semi-determinate growth, for example, with the termination of the stem with the 9th inflorescence (e.g. 'Prisca' type) or higher than the 20th inflorescence (e.g. Early Pack type).

#### <u>Indeterminate (2):</u>

In this type, as a rule, three leaves or internodes are observed between inflorescences. After every group of three leaves, the plant produces three buds: the terminal bud is transformed into an inflorescence and one of the two lateral buds starts the prolongation of stem. Plants of this type grow with the continuous repetition of this growth pattern.

## Ad. 7: Leaf: attitude

The attitude of the middle third part of the leaves in respect to the main stem should be observed. The line in the picture indicates the angle between the stem and leaf (middle third of petiole).



3 semi-erect



5 horizontal



7 semi-drooping



9 drooping

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# Ad. 10: Leaf: type of blade

Pinnate leaf: primary leaflets do not bear secondary leaflets Bipinnate leaf: primary leaflets again are pinnate, so they bear secondary leaflets



## Ad. 16: Inflorescence: type

The number of uniparous and multiparous trusses on the second and third truss of 10 plants should be counted. When the ratio of uniparous to multiparous is 40-60 percent, the expression of the characteristic should correspond to note "2".



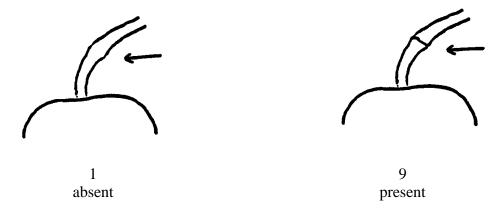
uniparous

multiparous (biparous)



multiparous (triparous)

## Ad. 19: Peduncle: abscission layer



Varieties which have only a collar instead of an abscission layer are heterozygous for the gene which controls the presence of the joint. These varieties are considered jointless and the abscission layer is considered absent.

## Ad. 21: Fruit: green shoulder (before maturity)

The gene for green shoulder might not be clearly expressed in some conditions, which is why it is important to have the example variety 'Daniela' to observe the expression of these characteristics.



Ad. 28: Fruit: shape in longitudinal section

		<b>←</b>		broadest part →			
	(below middle)		at middle		(above middle)		
ongated)							
narrow (elongated)	10 pyriform	8 ovate	(parallel) 5 cylindric	(rounded) 6 elliptic	9 obovate	7 cordate	
1	7		AND THE REAL PROPERTY OF THE P				
(width)							
ength/			(parallel)	(rounded)			
ratio le	11 obcordate		4 oblong	3 circular			
sed)			2				
broad (compressed)			oblate				
			1 flattened				

The apex is considered to be the part that is farthest from the peduncle end.

## Ad. 29: Fruit: ribbing at peduncle end



# Ad. 36: Fruit: number of locules

This characteristic is assessed by making cross sections of representative shaped and sized fruits but excluding the first and last fruits from the truss.

