

Fresh Market Tomato Sampling & Growth Stages

Timing: Begin sampling at stage 2 (vegetative growth) and monitor every 14 days or as required

Sample volume: 20-30 petioles and or young fruit

Sampling Petioles: Collect 1 composite leaf per plant, select the youngest fully expanded leaf (YFEL), usually the fourth leaf from the top, from actively growing plants. Discard the leaflets and retain the centre petioles for analysis.

Sampling Fruit: Collect young fruit from the apex of the inflorescence (first maturing fruit) commencing with the first or second inflorescence and continuing as required. Send whole fruit. If mature or large fruit is sampled, fruit quarters may be frozen ASAP, then send well insulated to reduce volume. Always use leak proof containers for fruit samples.

Sample from a representative area in the crop and return to the same area for subsequent samples.

Primary Stage	Secondary Stage	Description	Comments
1.0	Leaf development		
	1.5	Seedling	5 leaves on main shoot unfolded.
	1.6		6 leaves on main shoot developed
2.0	Formation of side shoots		
	2.1	Vegetative growth	1 st primary apical side shoots visible
	2.5		5 primary side shoots visible
	2.9		9 or more primary side shoots visible
6.0	Flowering (Stage starts as soon as first flowers are visible, even if plants are still producing side shoots)		
	6.1	Flowering	1 st inflorescence; first flower on open
	6.5		5 th inflorescence; first flower open
	6.9		9 th inflorescence; first flower open
7.0	Development of fruit (Stage starts as soon as the first green fruit is set, even if plants are still flowering/growing at the same time)		
	7.1	Fruit development	Green fruit set on 1 st cluster (inflorescence)
	7.3		Green fruit set on 3 rd cluster (inflorescence)
	7.5		Green fruit set on 5 th cluster (inflorescence) <i>(and so on)</i>
8.0	Ripening of Fruit (Stage starts as soon as first pink breaker fruit is visible)		
	8.1	Maturing	First (healthy) fruit has turned pink on 1 st cluster (inflorescence)
	8.3		Fruit show (pink to red) colour on 3 rd cluster (inflorescence)
	8.5		Fruit show (pink to red) colour on 5 th cluster (inflorescence)
	8.91	Harvest	1 st pick
	8.92		2 nd pick
	8.95		5 th pick <i>(and so on)</i>

Growth Stage numbering system is in accordance to the extended BBCH, a uniform coding of phenologically similar growth stages for all plant species

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Ph: 03-6420 9600, Fax 03-6427 0230, info@agvita.com.au, www.agvita.com.au