

Pome Fruit

Sampling & Growth Stages

Apples and Pears

Timing: Begin sampling at fruit set, then take three samples during fruit development at equal weeks apart. Sample again at harvest and take a final sample post harvest to monitor any post harvest application.

Sample volume: 20 shoot tips.

Sampling: Collect 10 cm of new shoot tips from current season's growth at mid crown height (or shoulder height for large trees). Sample from the same trees for subsequent sampling.

Fruit Sampling: 20 Fruitlets are selected from around the whole tree at stage 7.1 (10mm fruit size) to stage 8.7 (harvest) from representative trees.

Primary Stage	Secondary Stage	Description	Comments
1			<i>Leaf development</i>
	1.1		First leaves unfolding
	1.9		First leaves fully expanded
3			<i>Shoot development</i>
	3.1		Axes of developing shoots visible
	3.2		Shoots 20% of final length
	3.9		Shoots 90% of final length
5			<i>Inflorescence emergence</i>
	5.1		Inflorescence buds swelling, bud scales elongated with light coloured patches
	5.3		Bud burst: green leaf tips enclosing flowers visible
	5.5		Flower buds closed but visible
	5.7		Red bud stage: flower petals elongating, sepals slightly open, petals just visible
	5.9		Most flowers with petals forming a hollow ball
6			<i>Flowering</i>
	6.1	<i>Fruit set</i>	Beginning of flowering: 10% of flowers open
	6.5		Full flowering: 50% of flowers open, first petals falling
	6.9		All petals fallen, end of flowering
7			<i>Fruit development</i>
	7.1		Fruit size up to 10mm, fruit fall after flowering
	7.2		Fruit size up to 20mm
	7.3		Second fruit fall
	7.4		Fruit diameter up to 40mm: T stage, underside of fruit and stalk forming a T
	7.5		Fruit about half final size
8			<i>Maturity of fruit</i>
	8.1		Beginning of ripening
	8.5		Advanced ripening, increase in intensity of cultivar -specific colour
	8.7		Fruit ripe for harvest
9			<i>Beginning of dormancy</i>
	9.1		Shoot growth completed, foliage still fully green
	9.7		All leaves fallen

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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