

Ware and Crisping Potato Sampling & Growth Stages

Timing: Begin sampling at stage 1.7 (vegetative, pre-tuber) and go to stage 4.6 (mid tuber bulking)

Sample volume: 30 petioles

Sampling: Collect samples from a representative area in the crop. Return to the same area for subsequent samples. Collect 1 leaf per plant; select the youngest fully expanded leaf (YFEL), usually the third or fourth leaf from the top. Discard the leaflets and retain the petioles for analysis

Growth stages describe the stage most plants within a crop have reached (60% or more)

Primary Stage	Secondary Stage	Description	Comments
1	Early vegetative growth		
	1.5	Emergence	5 Leaves on main stem
	1.7	Pre-tuber	Full emergence, no swelling of stolons
	1.8	Begin of tuber Initiation	Tuber twice the diameter of stolon
2	Mid vegetative growth		
	2.3	Tuber set	Tubers developed on 30% of stolons
	2.7		Tubers developed on 70% of stolons
3	Crop cover (row closure)		
	3.1	Late tuber initiation	Tuber 1 - 2 cm diameter
	3.3		Tuber 2 - 2.5 cm diameter
4	Tuber Formation		
	4.1	Early tuber bulking Foliage erect	Tuber 2.5 - 3 cm diameter
	4.2		Tuber 3 - 4 cm diameter
	4.3		Tuber 4 - 5 cm diameter
	4.4	Mid tuber bulking Foliage horizontal	Tuber 5 - 6 cm diameter
	4.5		Tuber 6 - 8 cm diameter
	4.6		Tuber 8 - 10 cm diameter
	4.7	Late tuber bulking Vegetative growth ceased	Tuber 10 - 12 cm diameter
	4.8		Tuber sizes per plant even out
	4.9		Tuber skin set

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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