

Sorghum Sampling & Growth Stages

Timing: Begin sampling at primary stage 1 (vegetative growth) or 3 (early reproductive growth) and sample fortnightly or as required.

Sample volume: Stage 1: 20-30 plants; **Stage 3 onwards:** 20 lower stem segments

Sampling: Select plants from a representative area of the crop. Collect entire young plants (no roots) during stage 1. From Larger plants (>=stage 3), cut a 10 cm stem piece from above ground level. Return to the same paddock area or transect for subsequent samples (plant or soil)

Plant part for analysis: Stage 1 only: Entire plant, no roots, **Stage 3 plus:** 10 cm stem piece, no roots or excess foliage

Primary Stage	Secondary Stage	Description	Comments
1			<i>Leaf development</i>
	1.3	Vegetative growth	3 leaves unfolded
	1.5		5 leaves unfolded
3			<i>Growing point differentiation</i>
	3.1	Early reproductive growth	Head detectable low in plant
	3.5		Head detectable mid plant
	3.9		Final leaf visible in whorl
5			<i>Inflorescence emergence</i>
	5.1	Booting	Head in flag leaf
	5.3		Tip of head visible
	5.5		Mid booting
	5.9		Head full size in flag leaf
6			<i>Anthesis (Pollination)</i>
	6.1	Flowering	10% bloom (from tip of head downwards)
	6.3		30% bloom
	6.5		50% bloom
	6.7		70% bloom
	6.9		End of flowering
7			<i>Development of grain</i>
	7.1	Soft dough	Beginning of grain fill
	7.5		Grain fill 50% complete
	7.9		Nearly all grain has reached final size
8			<i>Ripening</i>
	8.5	Hard dough	50% final dry matter
	8.7		70% of grain dry weight reached
	8.9		Mature grain

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

© 2008 AgVita Analytical Pty Ltd., PO Box 188, Devonport TAS 7310
Ph: 03-6420 9600, Fax 03-6427 0230, info@agvita.com.au, www.agvita.com.au