



Herbage Development Fact Sheet 4 • By Eric Hall and Andrea Hurst

## Cocksfoot, cv. Megatas<sup>(b)</sup>

(*Dactylis glomerata* L.)

### Origin

Recurrent phenotypic selection: 4 cycles of recurrent phenotypic selection for seedling vigour, early tillering of seedlings and a more prostrate growth habit from accession K2725, collected as seed by Margot Forde near Silva, La Coruña, Spain (43° 09'N 8° 25'W), 1989. Selection criteria: vigour, seedling vigour, early tillering of seedlings, uniform flowering time and a more prostrate growth habit. Propagation: seed. Breeders: Eric Hall and Andrea Hurst, Tasmanian Institute of Agricultural Research, Mt Pleasant Laboratories, Launceston, Tasmania.

### Description

Ploidy: tetraploid. Foliage: fineness broad. Plant type: perennial forage grass, persistence: persistent.

### Major attributes

Megatas<sup>(b)</sup> was selected for its excellent seedling vigour and increased leafiness and vigour with a low crown (Fig. 1). It is highly summer active producing a large bulk of highly palatable, high protein, high-energy forage all year round with a high level of digestibility and nutritive value. Megatas<sup>(b)</sup> has little or no aftermath heading, producing leafy feed throughout summer.

### Seasonal production

Megatas<sup>(b)</sup> is highly summer active and is an ideal plant for summer dominant rainfall areas, but produces a large bulk of forage all year round.

### Drought tolerance

Can tolerate moderate levels of moisture stress.

### Cold tolerance

Moderate. Suffers frost damage if frosts greater -3° C.

### Waterlogging tolerance

Will tolerate short periods of waterlogging.

### Salt tolerance

Low.

### Soil and climate requirements

Adapted for sowing into all well drained

soil types of moderate to high fertility, in medium to high rainfall temperate areas receiving 600+mm average annual rainfall.

### Maturity

Flowers a few days later than Porto. Seed matures late January/early February.

### Seed size

Thousand seed weight 1.02gms (Porto 0.71gms).

### Seed treatment

None required.

### Sowing methods

Drilled, direct drilled or broadcast.

### Sowing depth

No deeper than 10mm.

### Sowing rate

2–5kg/ha.

### Sowing time

Suitable for sowing in autumn or spring with other forage grasses and legumes.

### Land preparation

Well-cultivated firm seedbed required for best results. For direct drilling or broadcasting there should be as little vegetation as possible and adequate soil moisture prior to sowing.

### Compatibility with other species

Suitable for sowing with other forage grasses and legumes with high seedling vigour. May out compete some slower establishing legume species.

### Suggested mix

Megatas<sup>(b)</sup> and Rubitas<sup>(b)</sup> or Astred<sup>(b)</sup> stoloniferous red clover.

### Seedling vigour

Excellent seedling vigour when compared to other cocksfoot varieties.

### Grazing management

To maintain the high feed quality of this cultivar grazing should take place prior to the plants reaching 5-leaf stage. Best suited to a high input rotational cattle grazing system, although will persist if closely grazed by sheep.

### Dry matter yield

Up to 16 t/ha DM achieved under irrigation.

### Feed value

High, declining slowly with maturity.

### Typical feed test figures

Crude protein (%DM)	17.1
Digestibility (%digestible DM)	78.9
Metabolizable energy (MJ/kg DM)	11.6

### Anti-quality factors

None known.

### Seed harvest methods

Direct heading. Seed sheds when mature.

### Seed yields

Yields around 600 kg/ha are achievable. (Fig. 1)

### Diseases

Minor cases of rust have been observed on some plants in wet summers.

Pests: none known

### Animal performance

Comparable lamb liveweight gains for lambs grazing Megatas<sup>(b)</sup> vs lambs grazing perennial ryegrass. (Table 1)

Table 1. Average lamb live weight gains (kg) (28 day grazing cycles) grazing pure swards of a range of grass species

Treatment	October	December
Banquet (perennial ryegrass)	10.75	3.29
Exceltas (coloured brome)	10.68	3.10
Flecha (winter active fescue)	8.99	0.73
<b>Megatas<sup>(b)</sup> (cocksfoot)</b>	<b>10.16</b>	<b>3.44</b>
Porto (cocksfoot)	10.44	1.92
Uplands (hispanic cocksfoot)	10.80	2.40
Victoca (perennial ryegrass)	10.57	1.26

Data extracted from the TIA Burlington Road Annual Report May 2011



Figure 1. Megatas(ℓ) plant - highlighting the low densely tillered crown.

Figure 2. Megatas(ℓ) seed crop

(ℓ) Variety is protected by Plant Breeders Rights



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