COLOURED BROME, CV. EXCELTAS ⁽ᵖ⁾

(Bromus coloratus Steud.)

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ORIGIN

Natural and recurrent phenotypic selection: 3 cycles of natural selection and 3 cycles of recurrent phenotypic selection for seedling and plant vigour, high tiller numbers and uniform flowering. From USDA accession PI 202696, collected Centinella Agricultural Experimental Station, Orsono, Chile, 1952.

Selection criteria: vigour, seedling vigour, high tiller density, uniform flowering time and a more prostrate growth habit.

Propagation: seed.

Breeder: Eric Hall, Tasmanian Institute of Agricultural Research (TIAR), Mt Pleasant Laboratories, Launceston, Tasmania.

DESCRIPTION

Ploidy: tetraploid.

Foliage: fineness medium.

Plant type: perennial forage grass, persistence: persistent.

MAJOR ATTRIBUTES

A high yielding long-lived perennial grass, with excellent late spring/early summer growth. Exceltas⁽ᵖ⁾ is a legume friendly grass which remains palatable even when seeding. It is tolerant to pasture grubs and has no known anti quality factors.

SEASONAL PRODUCTION

Exceltas⁽ᵖ⁾ is summer active, producing a large bulk of high protein, high energy forage all year round with a high level of digestibility and nutritive value. Exceltas⁽ᵖ⁾ out yielded all perennial ryegrass cultivars in late spring/early summer in a merit testing trial carried out by the Tasmanian Department of Primary Industries and Water (DPIW) at Elliott Research Station, Tasmania.

DROUGHT TOLERANCE

Plants in trials have shown they can tolerate moderate levels of moisture stress.

COLD TOLERANCE

Moderate. Suffers some leaf damage if frosts greater –3° C.

WATERLOGGING TOLERANCE

Moderate.

SALT TOLERANCE
Low.

SOIL AND CLIMATE REQUIREMENTS
Adapted for sowing into all well drained soil types of moderate to high fertility, in temperate areas receiving 650+mm average annual rainfall.

MATURITY
Similar maturity to Victorian ryegrass. Seed matures by mid/late December.

SEED SIZE
Thousand seed weight 7.690gms (perennial ryegrass 1.919gms).

SEED TREATMENT
Clipping the awn may assist handling.

SOWING METHODS
Drilled, direct drilled or broadcast.

SOWING DEPTH
Preferably around 10 mm. No deeper than 20mm.

SOWING RATE
15 – 25kg/ha, depending on seed bed quality.

SOWING TIME
Suited to both autumn and spring sowing.

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
Exceltas$^{\Phi}$ is best suited for sowing as the dominant grass in a mix with legumes that have high seedling vigour. May out compete some slower establishing species.

SUGGESTED MIX
Exceltas$^{\Phi}$ (when available) and Astred$^{\Phi}$ stoloniferous red clover.

SEEDLING VIGOUR
Excellent.

GRAZING MANAGEMENT
Best suited to a high input rotational grazing system.

DRY MATTER YIELD
Over 16 t/ha DM/year achieved under irrigation at Elliott Research Station, Tasmania.

FEED VALUE
High, declining slowly with maturity.

TYPICAL FEED TEST FIGURES

Crude protein (%DM)	24.8
Digestibility (%digestible DM)	79.8
Metabolizable energy (MJ/kg DM)	11.7

ANTI QUALITY FACTORS
None known.

SEED HARVEST METHODS
Direct heading. Seed begins to shed even when it appears green.
Seed has been successfully harvested green and dried.

SEED YIELDS
Yields around 1 t/ha are achievable.

DISEASES
None recorded.

PESTS
Susceptible to lucerne flea attack as seedlings, but established swards appear resistant.

ANIMAL PERFORMANCE
No data available at this stage.

HERBAGE PRODUCTION DATA

COMPARATIVE DAILY HERBAGE PRODUCTION OF EXCELTAS$^{\Phi}$ COLOURED BROME AND BRONSYN$^{\Phi}$ PERENNIAL RYEGRASS.

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