

SPANISH COCKSFOOT, CV. SENDACE[Ⓢ]

(Dactylis glomerata ssp. hispanica Savi.)

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ORIGIN

Recurrent phenotypic selection: 5 cycles of recurrent phenotypic selection for seedling vigour, dense tillering and a more prostrate growth habit within CPI 134670, collected by Bob Reid (ex TIAR) as seed near Zamora, Zamora province, Spain (41° 32'N 05°47'W).

Propagation: seed.

Breeders: Eric Hall and Andrea Hurst, Tasmanian Institute of Agricultural Research, Mt Pleasant Laboratories, Launceston, Tasmania.

DESCRIPTION

Ploidy: tetraploid.

Foliage: fineness fine to very fine.

Plant: type Mediterranean or hispanica perennial forage grass, persistence persistent, growth habit medium to semi-prostrate, tillering density high, maturity medium, colour medium to dark green with greyish hue (RHS 133A).

Stem: width very narrow mean 0.85mm, number per plant mean 67, length (inc. inflorescence) mean 812.9mm, length of upper internode mean 329.7mm.

Flag leaf: length mean 111.2mm, width mean 4.13mm.

Inflorescence: length mean 98.9mm, date of emergence mean 27 Oct (118.38 days from day 0 = 1 July), (92.21 days from day 0 = 27 August), colour of anthers mostly pale yellow.

ADAPTATION

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

MAJOR ATTRIBUTES

Sendace[Ⓢ] is a very compact densely tillered fine leafed cocksfoot which is totally summer dormant giving it a very high level of drought tolerance. It grows rapidly in autumn to late spring producing high protein, high-energy forage with a high level of digestibility and nutritive value.

Best adapted for sowing on dry hill country in temperate areas receiving 300mm to 600mm average annual rainfall. Its very fine leaf and prostrate growth habit would make it an ideal plant for living mulch in orchards and vineyards. Would also make an ideal lawn grass for dry areas.

SEASONAL PRODUCTION

Sendace[Ⓢ] is highly summer dormant, but grows rapidly in autumn to late spring producing high protein, high-energy forage with a high level of digestibility and nutritive value.

DROUGHT TOLERANCE

Its ability to become totally dormant through extended dry periods gives Sendace[®] an extremely high level of drought tolerance in a temperate environment.

COLD TOLERANCE

Very high. Tolerates frosts to -10° C with little or no frost damage.

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 low rainfall temperate areas receiving less than 600mm average annual rainfall. It is best adapted for sowing on dry hill country in areas with cold winters and dry summers.

MATURITY

The mean flowering date of Sendace[®] is 27 Nov, approximately 10 days earlier than Porto. Seed matures late January.

SEED SIZE

Thousand seed weight 0.54gms (Porto 0.71gms).

SEED TREATMENT

None required.

SOWING METHODS

Drilled, direct drilled or broadcast.

SOWING DEPTH

No deeper than 5mm.

SOWING RATE

2 – 5kg/ha.

SOWING TIME

Preferably late summer to early autumn for sufficient seedling development coming into winter, but can be sown in spring.

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 low to moderate seedling vigour. May be overwhelmed by more vigorous species.

SUGGESTED MIX

Spanish cocksfoot, winter active tall fescue, phalaris, Talish clover (when it becomes available) and Caucasian clover.

SEEDLING VIGOUR

Seedlings are very small and slow to establish, but can withstand competition.

GRAZING MANAGEMENT

Very prostrate in the seedling stage so can be grazed early to reduce competition. Once established, Sendace[®] can tolerate persistent close grazing by sheep. It is far less likely to become clumpy than Porto type cocksfoots.

DRY MATTER YIELD

Up to 6t/DMha achieved under dryland conditions at Mt Pleasant, 13% less than Porto in the same trial.

FEED VALUE

High, particularly in protein.

TYPICAL FEED TEST FIGURES

Crude protein (%DM)	22.5
Digestibility (%digestible DM)	76.9
Metabolizable energy (MJ/kg DM)	11.3

ANTI QUALITY FACTORS

None known.

SEED HARVEST METHODS

Direct heading, cutter rowing. Holds seed very well, can be very difficult to thresh from heads.

SEED YIELDS

Yields around 400kg/ha are achievable.

DISEASES

May suffer from rust in years where summers are wet.

PESTS

Resistant to pasture grub attack, susceptible to heavy corbie infestations.

PRODUCTION DATA

SEASONAL HERBAGE PRODUCTION OF SPANISH COCKSFOOTS, SENDACE, UPLANDS AND KASBAH RELATIVE TO PORTO, LAUNCESTON, TAS.

