Register of Australian Herbage Plant Cultivars

B. Legumes
15. Centro
a. *Centrosema pubescens* Benth. (centro)

cv. Belalto
Reg. No. B-15a-1
Registered September 1971

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Origin

Derived from seed collected by Dr. B. Grof of the Queensland Department of Primary Industries in December 1965, at the El Alto Research Station of the Costa Rica Ministry of Agriculture: this station is situated on the San Jose Plateau at an Altitude of 610 m and receiving an annual rainfall of 2972 mm. Belalto was tested as Q8333 by the Queensland Department of Primary Industries from 1966 to 1971 at the South Johnstone Research Station.

Submitted by the Queensland Department of Primary Industries and recommended for registration by the Queensland Herbage Plant Liaison Committee. Registered September, 1971.

Morphological description

Belalto is a vigorous, leafy, trailing and climbing perennial characterised by slender stems which have a strong tendency to root at the nodes. The leaves are trifoliate; the leaflets ovate or orbicular, approximately 3 cm long and 1.3-2 cm wide, shortly acuminate and finely pubescent. The leaflets when young and the terminal portions of the stolons are typically purplish brown. Stipules long and persistent. The flowers are borne in axillary racemes, each flower being subtended by two striate bracteoles. The calyx tube is campanulate, the teeth unequal, the two upper ones being ovate-triangular. The standard is roughly circular, approximately 2 cm broad, and much longer than the wings and keel; deep mauve or bluish violet in colour. The pods linear, about 13 cm long, flat, not ridged, with a thing projection at the distal end, dark brown when ripe and containing approximately 13 seeds. The seeds are transversely oblong to very slightly reniform, approximately 5 mm long. Newly harvested seed is yellow to yellow-green with black and deep brown markings. Number of seeds/kg approximately 36 000.

Belalto differs from the form of *Centrosema pubescens* currently grown in Queensland in having a less-twining growth habit, a stronger tendency to root at the nodes; somewhat smaller, more rounded, and densely pubescent leaflets; a purplish brown coloration in the young leaflets and distal portions of the stolons; slightly smaller and deeper-coloured flowers; pods which are not ridged along both sutures.

Agronomic characters (1)

Belalto was the most consistently high-yielding line of *Centrosema* spp. tested at South Johnstone. It has an active growth rate over the cool season and is able more fully to utilise the moisture and temperature conditions existing in the wet tropics at this time of the year than the present commercially grown form of this species. It nodulates readily with the Standard inoculant (based on CB1923) for centro.

The high cool-season yield has been due in part to relative freedom from leaf-damaging attacks of the disease *Cercospora* leaf spot and the insect red spider (*Tetranychus* sp.).

Belalto has also been able to withstand weed invasion better than other centro lines and has persisted better under grazing. The better survival under grazing appears to be a function of its overall more vigorous growth and its twining/trailing growth habit with well developed stolons which root down readily.

Belalto will have its main value in the wet coastal pastures of the Queensland tropics. It could also be used in areas where the winters are to cold and too long for vigorous growth of common centro.

References

1. Grof, B., and Harding, W.A.T. (1970). Yield attributes of some species and ecotypes of *Centrosema* in North Queensland. *Qd.. Agric. Sci.* **27**(2), 237.
2. Harding, W.A.T., and Cameron, D.G. (1972). New pasture legumes for the wet tropics. *Qd. Agric. J.* **98**, 394-406.