Agnote

No: E20

May 2009

Bundey

(Centrosema pascuorum cv Bundey*)*

A. G. Cameron, Principal Agronomist Pasture Development, Darwin

DESCRIPTION

Bundey (*Centrosema pascuorum* cv Bundey) is a prostrate annual twining legume which produces roots on trailing stems in favourable conditions. The stems which extend up to 2 m from the crown of the plant are hairy.

Leaves are trifolate, often held erect. Leaflets are linear-lanceolate (long and narrow), commonly 5-10 cm long and 5-10 mm wide. Flowers are crimson in colour, 1.5-2.5 cm long and wide. Mature pods are 3.5-7.0 cm long including an awn (beak) up to 1 cm long, and 3-4 mm wide. Pods contain up to 15 grey-green seeds. When mature the pods shatter explosively scattering seeds one metre or more. There are 58 000 seeds per kilogram.

Bundey commences flowering in mid April in the Top End, and produces large quantities of seed.

There is another cultivar of *C. pascuorum* released in Australia, cv Cavalcade. Bundey differs from Cavalcade in being later flowering (mid April cf mid March), and having hairy stems and smaller seeds (58 000/kg compared with 48 000/kg).

CLIMATE AND SOILS

Centrosema pascuorum is a native of seasonally arid regions in tropical South and Central America. Bundey is suitable for areas with reliable wet and dry seasons receiving 1,100 or more average annual rainfall.

It is adapted to a wide range of soil types. Bundey has survived prolonged waterlogging and up to three months of flooding on seasonally flooded soils. It does not survive when flooded for five months. Bundey tolerates flooding but does not grow well until the flood waters recede. It can also tolerate periods of drought during the wet season.

SOWING

For pasture sowings seed should be sown at 2-6 kg/ha depending on seed bed preparation and proposed end use. Sowing rates up to 15 kg/ha of seed can be used for annual hay crops to ensure establishment. For best results, seed should be sown into a well prepared seed bed.

Seed can be inoculated with Centro inoculant to ensure nodulation when sowing Bundey in new areas. This is not necessary if legumes have been grown in the area previously, or if there are native legumes present.

MANAGEMENT

Fertiliser Requirements: The type and rate of fertiliser to apply depends on soil type, but generally superphospate at a rate of 100-250 kg/ha should be applied on virgin or previously unfertilised areas at sowing.

In subsequent years further fertiliser should be applied as maintenance dressings of 50-100 kg/ha of super per year.

Applications of potassium, molybdenum or zinc fertilisers may be necessary on some soils.

If you are unsure of the fertiliser requirements, check with a departmental advisory officer before sowing.

Yield: In pure swards under good growing conditions, Bundey provides 4-6 tonnes of high quality herbage and over 8 tonnes under ideal conditions. Yields of over 10 tonnes have been reported in some commercial hay crops.

Seed yields up to 800 kg/ha have been recorded.

Grazing: As Bundey is very palatable and is well accepted and sought out by stock, there is currently some doubt about its ability to persist in continuously grazed mixed pastures.

It can maintain its high quality during the dry season because it retains most of the dead leaf on the stems. This makes Bundey particularly useful as a stand over feed.

Bundey should not be grazed in the year of establishment before it has set seed.

Mixtures: Grasses with which Bundey could be sown are Basilisk signal grass, Tully, para, pangola, Guinea grass and Kazungula setaria.

Hay: Good quality hay can be made from Bundey. It is well accepted and sought after by stock. The area may need renovating every three or four years to maintain a pure stand of Bundey as a hay crop.

PEST AND DISEASES

After periods of wet weather small patches of dead leaves (leaf blight) can be found in swards. These are caused by the fungus *Rhizoctonia* sp. The areas involved are generally only small and no control measures are required. In recent years, larger patches of *Rhizoctonia* have been found in commercial crops after a number of consecutive crops in the same area. The only current control measure is to use a grass pasture or crop in rotation with Bundey.

A flea beetle (*Pagria* sp.) has been recorded on Bundey. These small beetles can reach plague proportions and severely defoliate swards. Control may be necessary in seed crops.

Pod sucking bugs, pod borers and other insects can cause almost total loss of a seed crop. They should be monitored from the commencement of flowering and controlled if necessary.

WARNING

Pasture plants have the potential to become weeds in certain situations. To prevent that, ensure that pasture seeds and/or vegetative materials are not inadvertently transferred to adjacent properties or road sides.

Please visit us at our website:

www.nt.gov.au/d

Department of Regional Development, Primary Industry, Fisheries and Resources

ISSN 0157-8243
Serial No. 427
Agdex No. 137/10