Wallaby grass (Austrodanthonia bipartita, A. richardsonii)

Scientific name(s)

*Austrodanthonia bipartita* (Link) H.P. Linder (syn. *D. linkii* Kunth) cv. Bunderra
*Austrodanthonia richardsonii* (Link) H.P. Linder (syn. *Danthonia richardsonii* Cashmore cv. Taranna)

Strengths

- Native perennial
- Producers high quality, nutritious green winter feed
- Persistent under heavy grazing
- Withstands drought and frost
- Tolerant of poor fertility an moderate acid soils

Limitations

- Seed costs are high
- Like most native grasses, seedling growth rates are generally low and establishing seedlings can be out-competed by annual or weedy species

Plant description

A tufted perennial which characteristic fine leaves and hairs on the ligule (at the base of the leaf blade).

**Plant:** Bunderra is generally taller (1 m) than Taranna (0.6 m)

**Leaves:** Leaf blades of Bunderra are longer and slightly wider than those of Taranna

**Seedhead:** Bunderra has much larger, more lanceolate seed heads than Taranna's which are more ovate

**Seeds:** Taranna seeds larger than those of Bunderra.

Pasture type and use

- 

Where it grows

**Rainfall**

Temperate environments; lower (MAR) limits are 400mm (Southern NSW) and 500 mm
(Northern NSW)

**Soils**

Bunderra is suited to heavier textured soils than Taranna which is adapted to medium textured soils but will also establish on sandy soils.

**Temperature**

Whilst optimum temperature range for germination is 15°С-25°С, germination declines when average temperature is below 20°С
Establishment

Companion species
Taranna and Bunderra are best sown without competition from legumes. Once established, Wallaby grass pastures can be over sown with legumes

Sowing/planting rates as single species
Surface sown at 0.3-2.0 kg/ha. Cover seed with soil to a depth of 5-10 mm

Sowing/planting rates in mixtures
Not recommended

Sowing time
Optimum germination temperatures range from 15oC-25o C. Late autumn/early winter

Inoculation
Not applicable

Fertiliser
Phosphorus may have a negative impact on seedling establishment

Management

Maintenance fertiliser
Moderate quantities of nitrogen (50kg/ha) applied in spring will increase tiller number

Grazing/cutting
Tolerates grazing. Intolerant of high intensity grazing for long periods. Best either rotationally grazed, or grazed at low stocking rates that maintain mean herbage mass above 1500-2000 kg DM/ha and 70% ground cover (for high rainfall zones of southern Australia). This ensures that it is only partially defoliated and allows recovery after grazing to maintain growth, vigour and ground cover.

Seed production
Nitrogen application (25-50kg/ha) at late vegetative and post-flowering may not increase seed yield. Effects of earlier applications of nitrogen are unknown
Seed harvesting methods include windrowing and brush harvesting; however, for Bunderra turning of windrows can result in reduced seed yields associated with losses of florets from seedheads
Seed yields vary from 18-98 kg/ha for Taranna and 8-121 kg/ha for Bunderra (based on a density of 1 plant/m2)

Ability to spread
High rates of recruitment

Weed potential
Unknown

Major pests
None known

Major diseases
None known

Herbicide susceptibility
Glyphosate at rates >360 g a.i./ha; seedlings metsulfuron-methyl at rates >12 g a.i./ha

Animal production
Feeding value

Moderate to high during growing season; crude protein ranges from 10-17% and digestibility from 45-74%

Palatability

Readily consumed by livestock

Production potential

5-7.8 t/ha of biomass per year

Livestock disorders/toxicity

None known

Cultivars

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Seed source/Information</th>
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<tr>
<td>Bunderra (A. bipartita)</td>
<td>Native Seeds Pty Ltd</td>
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<tr>
<td>Taranna (A. richardsonii)</td>
<td>NSW DPI</td>
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Denotes that this variety is protected by Plant Breeder's Rights Australia

Further information


Waters C, Whalley, W and Huxtable, C (2000). Grassed-up; guidelines for re-vegetation with Australian native grasses. NSW Agriculture (Orange)

Acknowledgements

Greg Lodge (NSW Department of Primary Industries)

Author and date

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