

# *Austrodanthonia popinensis*



*Austrodanthonia popinensis*.  
Tasmanian Herbarium specimen.

**FAMILY:** POACEAE

**BOTANICAL NAME:** *Austrodanthonia popinensis*, (D.I.Morris) H.P.Linder, *Telopea* 7(3): 273 (1997)

**COMMON NAME:** Roadside wallaby grass

**COMMONWEALTH STATUS:** (*EPBC Act*)  
Endangered

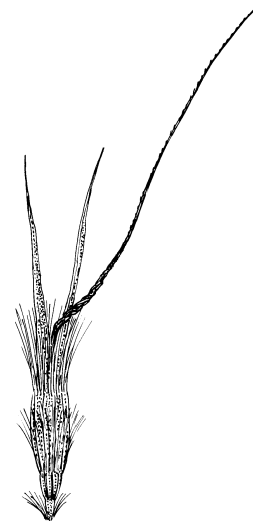
**TASMANIAN STATUS:** (*TSP Act*) endangered

## Description

A tufted, hairless, perennial grass up to 45 cm tall. **Stems:** The stems are smoothly ribbed with purple nodes. **Leaves:** The lower leaf blades are flat (at least at the base) and up to 15 cm long by 2 mm wide. The upper leaf surface is strongly ribbed, with the lower surface being finely ribbed. The base of the leaf blades is pale and often shiny. **Seedhead:** The seedhead is up to 10 cm long, linear to lance-shaped and pale green in colour. The branches and flower stalks are often covered with minute hairs. **Spikelets (units of the seedhead):** The spikelets are between 13-14 mm long with hair-like projections (awns) that are 3-4 mm long. They have 5-6 flowers. The leaf-like structures surrounding the spikelets (glumes) are approximately the same length, lance shaped and green in colour. They have wide, transparent margins and are approximately 14 mm long. This species flowers between November and February. **Seed (lemma):** The seed is between 4-4.5 mm long and bearded. The long hair-like projection (awn) is brown, approximately 12 mm long and tightly twisted (description from Curtis & Morris 1994). Herbarium specimens have been collected from January to May. **This species was previously known as *Danthonia popinensis* or *Notodanthonia popinensis*.**

## Distribution and Habitat

*Austrodanthonia popinensis* is endemic to Tasmania. It was initially collected in 1985 from a grassy roadside verge at Kempton in southern Tasmania, and was subsequently described (Morris 1990).



*Austrodanthonia popinensis*  
spikelet. R. Hale.

The majority of known populations occur on roadside verges in the southern and northern Midlands that are subject to annual slashing, mowing or sustainable grazing. The sites tend to be flat or gently sloping and the soils are usually rock free with a sandy loam/sandy clay loam topsoil. The original habitat was probably grassy open woodland dominated by *Eucalyptus pauciflora* (cabbage gum) and *Eucalyptus viminalis* (white gum) (Gilfedder & Kirkpatrick 1997).

### **Key Sites and Populations**

Key sites include the Brighton Army Barracks, Oberon Court (Sandy Bay), Birch Road (Lutana), Tea Tree Road (Brighton), Midland Highway (Mangalore), Ballyhooly Road (Mangalore), Midland Highway (Bagdad, south of Kempton, Conara & Cleveland) and Holllow Tree Road (Central Plateau). The largest population of this species occurs on the Brighton Army Camp site.

The estimated total area of occupancy of roadside wallaby grass is 9 hectares. The total number of individuals is approximately 140 000.

### **Known Reserves**

There are no known populations on reserves. Most of the populations occur on roadsides and some on adjoining private land.

### **Ecology and Management**

Inappropriate roadside management is currently the most serious threat to this species as most of the populations occur on roadsides. Maintenance schedules of roadsides along the Midlands Highway have been documented in Department of Infrastructure, Energy and Resources Management Plans. These plans include maps that detail locations of rare, vulnerable and endangered plants occurring along the roadside and their required management. As long as the management plans are kept up to date and the prescribed maintenance is sustainable and carried out as planned, the risk of loss of populations along the Midlands Highway is reduced (TSU 2003).

Upgrading of the Midland Highway and other roads where populations occur is also a threat, resulting in 3 populations being destroyed over the last 5 years.

Roadside populations have been observed to decline through lack of slashing to reduce competition and recover once slashing was reinstated (Kirkpatrick 2007). *Austrodanthonia popinensis* prefers open site conditions that can be provided by slashing/mowing once a year in autumn, after the seed has dispersed. The maintenance itself is a threat as open sites encourage weed invasion. Clearance of native woodlands in areas susceptible to salination can result in degradation of surrounding native grasslands (Barker 1999).

Allowing grazing throughout the whole year can prevent new seed from forming and dispersing and therefore new plants from germinating, thus persistent overgrazing is a threat (Barker 1999). It appears that *Austrodanthonia popinensis* is capable of vegetative growth (increase in tussock size) (Gilfedder and Kirkpatrick 1997).

Wind is the most likely pollination vector for this species (A. Hingston pers. comm.).

### **Conservation Status Assessment**

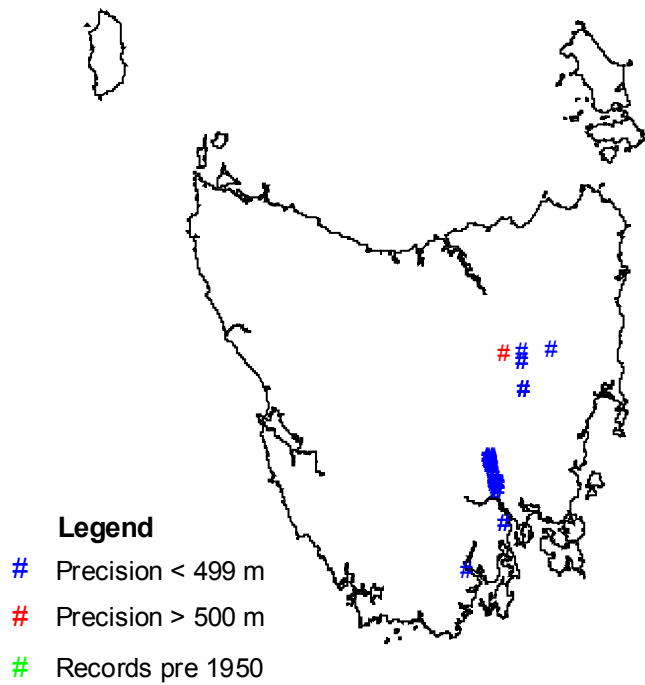
*Austrodanthonia popinensis* may qualify for downlisting to vulnerable.

## Further Information

- Barker, P 1999, *Recovery Plan for Tasmanian Native Grasslands 2000-2002*, Department of Primary Industries, Water and Environment, Hobart.
- Curtis, WM & Morris, DI 1994, *The Student's Flora of Tasmania*, Part 4B, Printing Authority of Tasmania, Hobart.
- Gilfedder, L & Kirkpatrick, JB 1997, 'Aspects of the Distribution, Phytosociology, Ecology and Management of *Danthonia popinensis* (D.I. Morris), an Endangered Wallaby Grass from Tasmania', *Papers and Proceedings of the Royal Society of Tasmania*, Vol.131.
- Harris, S & Gilfedder, L 1992, in Leigh, J & Briggs J eds *Threatened Australian Plants: Overviews and Case Studies, Danthonia popinensis*, Australian National Parks & Wildlife Service, Canberra
- Kirkpatrick JB 2007, Collateral benefit: unconscious conservation of threatened plant species. *Australian Journal of Botany*, vol. 55, pp 221–224.
- Morris, DI 1990, 'New Taxa and new combinations in Tasmanian Poaceae', *Muelleria*, Vol.7, No.2. pp.147-171.
- North, AJ 2000, *Biological Risk Management – State Road Network Sites of Critical Biological Conservation Significance Identification and Management*, unpublished report for Department of Infrastructure Energy and Resources, Hobart.
- North, AJ 2001, *Brighton Barracks – Survey for Roadside Wallaby Grass (Austrodanthonia popinensis) and other Threatened Flora Species*, unpublished report for Inspiring Place Pty Ltd.
- Threatened Species Unit 2003, *Draft Listing Statement Roadside wallaby grass Austrodanthonia popinensis*, Department of Primary Industries, Water and Environment, Hobart.

## Tasmanian Distribution

(As per Threatened Species Unit records, June 2003)



### 1:25 000 Map Sheets

Broadmarsh, Cleveland, Conara, Elderslie, Ellinthorp, Hanleth, Kempton, Tarooona, Tea Tree, Waterloo.

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