

# Rediscovery of *Glossocardia orthochaeta* (F. Muell.) Veldk. (Asteraceae) from north-east Queensland

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## Summary

Pollock, A.B. (2002). Rediscovery of *Glossocardia orthochaeta* (F. Muell.) Veldk. (Asteraceae) from north-east Queensland. *Austrobaileya* 6 (2): 341–343. Details of the third record of the rare and poorly known *Glossocardia orthochaeta* (F. Muell.) Veldk. are presented. The habitat of this taxon is described for the first time. A revision of its conservation status to “Vulnerable” is recommended.

Keywords: *Glossocardia orthochaeta*.

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## Introduction

The Queensland Herbarium (BRI) has recently completed a detailed survey of the vegetation of the far-eastern Einasleigh Uplands bioregion, as part of the mapping of the vegetation of the state of Queensland. This survey, conducted during ideal seasonal conditions for plant collection, has returned several records of rare or threatened taxa, as well as substantial range extensions of other plants. The most significant of these, the third collection of the rare *Glossocardia orthochaeta* (F. Muell.) Veldk., is outlined below.

This taxon was originally described as *Glossogyne orthochaeta*, from a single specimen (Mueller 1891). Veldkamp (1992) recently transferred the 3 Australian *Glossogyne* species in Australia to the genus *Glossocardia* Cass. A full description of *G. orthochaeta* is given by Veldkamp (1992).

*Glossocardia orthochaeta* is a striking plant with showy flower heads, the largest (c. 50 mm diameter) within the genus *Glossocardia* in Australia. Even when infertile, it is a distinctive large perennial plant to 80 cm tall (Fig. 1). It can be distinguished from all other Queensland *Glossocardia* by its size, numerous imbricate, non-basal cauline leaves, and presence of reflexed and transversely folded involucre bracts (Veldkamp 1992).

The only prior Queensland Herbarium (BRI) collection of *Glossocardia orthochaeta* is that of C.H. Gittins (collection no. 528), in 1962 from the Stannary Hills. The other collection of this taxon is held at the Royal Botanic Gardens and National Herbarium (MEL), recorded as “Near the South Coen River, 1891, Stephen Johnson s.n.” As noted by Veldkamp (1992), no details of habitat have previously been recorded. Indeed, it is nearly forty years since this species was last observed, a criterion that would suggest extinction for some other taxa, eg. fauna.

The Stannary Hills are known as an area of high local floristic endemism, and have undergone much botanical collection in the last 20 years. Several skilled botanists, from BRI and elsewhere, have extensively collected in this area where *G. orthochaeta* has been recorded previously. In addition, the earliest collection from the South Coen River remains the only record within the Cape York Peninsula area, despite extensive collection across this region some 100 years later by Neldner and Clarkson (In prep.). *Glossocardia orthochaeta* is a conspicuous plant in the field (Veldkamp 1992; pers. obs.), and is unlikely to have been missed. These observations suggest that the species is highly localised, or is restricted to microhabitats not frequented by plant collectors.

### Specimen details

**Queensland.** NORTH KENNEDY DISTRICT: Kallanda Station, about 50 km W/SW of Ingham, N. Queensland. 18°, 50'S 145° 50'E, April 2001 *Pollock 1083 & Turpin* (BRI).

**Habit:** An erect forb to 0.5 m tall with dark green sub-fleshy leaves, and large bright yellow flowers (Fig 1). Rare at this locality, only c. six plants observed, with only one individual flowering.

**Habitat:** Steep rocky granite gorge with boulder stacks and open areas of granite pavement. Soils are granitic lithosols. Growing on the edge of very tall open woodland of *Araucaria cunninghamii* with mid-dense shrub layer of *Labichea nitida* and *Acacia leptostachya*. A thin grassy ground layer of *Digitaria* sp. and *Eriachne pallescens* is present.

**Distribution:** This record is a significant range extension, some 220 km from the previous record of Gittins, making it the most southerly known. The range of this species covers some 700 km in total (Map 1).

**Status:** This species is currently recorded as "Rare" in the 2000 schedule of the Nature Conservation Act (1992). However, it is the author's opinion that the conservation status of this taxon needs to be reappraised. With no recent collections other than described above and no known populations conserved, it seems that a conservation coding of Vulnerable (VU) is appropriate, as category D of the IUCN Red list (Anonymous 2001) is fulfilled (population characterised by an acute restriction in area of occupancy (< 100km<sup>2</sup>) and found in less than 5 locations).

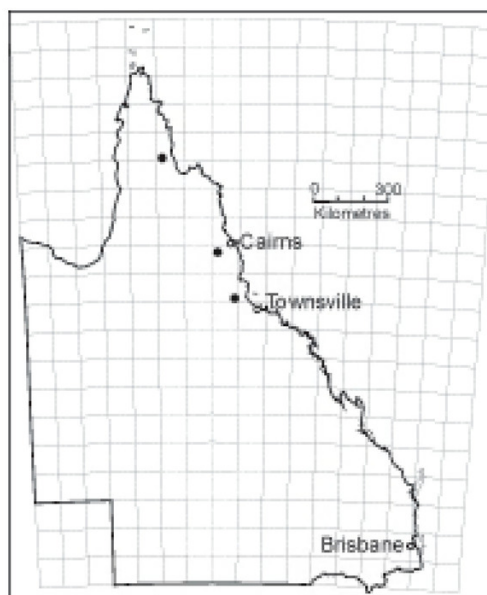
This species is likely to be found on granite rock pavements in partially shaded areas close to minor creeks, perhaps on the ecotone between dry vine or shrub thickets and open grassy woodlands. Gorge lands or deep valleys with moist influence may also be suitable. Further searches in suitable areas within its current known range are needed in order to determine the full extent of the population in this area.

### Acknowledgements

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### References

- ANONYMOUS, (2001). IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK. ii + 30 pp.
- MUELLER, F.V. (1891) Descriptions of new Australian Plants with occasional other annotations. *Victorian Naturalist* 8:110
- NELDNER, V.J. and CLARKSON, J. (In preparation) *Plants of Cape York Peninsula*. Queensland Herbarium, Queensland Government.
- VELDKAMP, J.F. (1992). Notes on Australian Coreopsidinae (Compositae). *Austrobaileya* 3(4): 741–744.



**Map 1.** Distribution of *G. orthochaeta* in north-east Queensland



**Fig 1.** *Glossocardia orthochaeta* F. Muell (Veldkamp). A.B. Pollock 1083 and G. Turpin, Kallanda Station, North Kennedy Pastoral District (BRI). (Approx. half natural size).





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