

## *Anthotium odontophyllum* (Goodeniaceae), a new species from Western Australia

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### Abstract

Sage, L.W. *Anthotium odontophyllum* (Goodeniaceae), a new species from Western Australia. *Nuytsia* 12 (2): 229-231 (1998). *Anthotium odontophyllum* Sage is described. It is endemic to the Western Australian wheatbelt, specifically the Dale and Avon Districts of the South West Botanic Province. Amendments to the key to *Anthotium* in the "Flora of Australia" are provided.

### Introduction

In the course of examining collections at the Western Australian Herbarium, material belonging to an undescribed species of *Anthotium* R. Br. (Goodeniaceae) was recognized amongst material placed in *A. humile* R. Br. Morrison (1992) included this taxon within his concept of *A. humile*, but detailed examination showed it to be a distinct species. The new species is related to *Anthotium humile* and *A. rubriflorum* F. Muell. ex Benth.

### Taxonomy

*Anthotium odontophyllum* Sage, *sp. nov.*

A *Anthotium humile* indusio et petalis inferioribus pilis glandularibus ornatis, a *A. rubrifloro* petalis cremeis et pedunculis brevioribus recedit.

*Typus*: Junction of Dumberning Rd and Forestry West Rd, Highbury State Forest (33°04' S, 117°06' E), Western Australia, 6 December 1996, G.S. Durell 132 (*holo*: PERTH 04552679; *iso*: CANB, K, NSW).

*Tufts*: clonal herb, with c. 4 separate tufts connected underground to a central rootstock, to 8 cm high and 7 cm wide. *Leaves* all basal, flat, spatulate, 12-58 mm long, 2-6 mm wide, margins usually denticulate; apex acute. *Flowering stalks* ribbed, typically curved, 0.9-3 cm long, usually just shorter

than the leaves; head compact, each of up to 9 crowded cymes; bracts linear, terete, though mostly flattened near the base, 5.5–14 mm long, 0.8–1.5 mm wide, apex obtuse to acute; bracteoles linear to triangular, 3.4–5.8 mm long, c.1 mm wide, apex acute to acuminate. *Calyx lobes* 3–4 mm long, 0.6–1.1 mm wide, apex acute to acuminate. *Corolla* cream, auricles sometimes purplish red; tube c. 1 mm long, inferior petals fused for a further 0.4–0.6 mm; inferior lobes 2.7–3.5 mm long, 1.2–1.5 mm wide, with glandular hairs on the inner anterior margins, auricle 1.2–1.8 mm long, 1–1.5 mm wide; superior lobes 2.5–4.8 mm long, 0.7–1.2 mm wide, wings 1.6–3.2 mm long, 0.4–0.5 mm wide. *Staminal filaments* 0.7–1.7 mm long; anthers 0.9–1.2 mm long. *Ovary* 2.2–3.5 mm long, ribbed, with 6–8 pairs of ovules per locule. *Style* bent or curved, 2.9–3.5 mm long; indusium with simple glandular hairs near the base. *Fruit* not seen.

*Other specimens examined.* WESTERN AUSTRALIA: Highbury State Forest, 6 Dec. 1996, *G.S. Durell* 133 (PERTH); Mokine road, S of Narrogin, 6 Dec. 1996, *G.S. Durell* 134 (PERTH); Foxes Lair, Narrogin, 6 Dec. 1996, *G.S. Durell* 135 (PERTH); Tutanning Reserve, 14 Dec. 1970, *A.S. George* 10517 (PERTH); S of Dumberning Siding, Narrogin to Arthur River, 26 Nov. 1984, *G.J. Keighery* 7861 (PERTH); Dryandra State Forest, 26 Nov. 1987, *D.M. Rose* 546 (PERTH); Dryandra State Forest, 30 Nov. 1987, *D.M. Rose* 556 (PERTH); Highbury Block, 22 Nov. 1995, *L.J. Silvester* 5 (PERTH);

*Distribution.* Occurs from Highbury in the Narrogin region, northwards to Dryandra National Park and Tutanning reserve in the western wheatbelt of Western Australia. This area is included in the Dale and Avon Botanical Districts in the South West Botanical Province of Western Australia.

*Habitat.* Occurs mostly in open *Eucalyptus wandoo* Blakely woodland over low heath, in mostly sandy clay soil.

*Conservation status.* Common within its distribution, with at least three populations located within nature reserves.

*Etymology.* The specific epithet, *odontophyllum* is from the Latin *odonto* – toothed, and *phyllum* – leaf, in reference to the minutely toothed leaf margins of the species.

*Affinities.* *Anthotium odontophyllum* is allied to *A. humile* and *A. rubriflorum*. *Anthotium humile* typically has entire linear-terete leaves to 1 mm wide (rarely to 2.5 mm when not inrolled), flowering stalks that are typically straight and inferior petals fused for 1.3–2.5 mm from the corolla tube. *A. odontophyllum* has denticulate spatulate leaves to 6 mm wide, typically curved flowering stalks and inferior petals fused for 0.4–0.6 mm from the corolla tube. *A. odontophyllum* can be readily distinguished from *A. rubriflorum* by its cream petals, much shorter flowering stalks and smaller ovary length. Morrison (1992) included *A. odontophyllum* in his description of *A. humile*; this would seem to have been due to a lack of adequate specimens at the time. Morrison's description of *A. humile* does not include the presence of glandular hairs near the base of the indusium and inner anterior margins of the inferior lobes which are clearly present on all the PERTH specimens.

### Key to the species

The *Anthotium* key in the "Flora of Australia" (Morrison 1992) should be altered to read as follows.

- 1 Leaves lanceolate or spatulate, 2–6 mm wide, flat, sometimes serrulate or denticulate
  - 2 Petals usually bright scarlet; flowering stalks 9–16 cm long, usually twice as long as the leaves; ovary 4–5 mm long ..... **A. rubriflorum**
  - 2: Petals cream or off white, auricles sometimes purplish red; flowering stalks 0.9–3 cm long, usually just shorter than the leaves; ovary 2.2–3.5 mm long ..... **A. odontophyllum**
- 1: Leaves linear to terete, 0.5–1 mm wide (rarely 2.5 mm wide when not inrolled)
  - 3 Flowering stems 2–7 cm long; corolla usually creamy white ..... **A. humile**
  - 3: Flowering stems 12–40 cm long; corolla pale blue or mauve ..... **A. junciforme**

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### References

- Morrison, D.A. (1989). The genus *Anthotium*. *Nuytsia* 7: 49–58.
- Morrison, D.A. (1992). *Anthotium*. In: George, A.S. (ed.) "Flora of Australia." Vol. 35. pp.15–16. (Australian Government Publishing Service: Canberra.)