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a new species from south-west  
Western Australia

Logania wendyae (Loganiaceae), a new species from south-west Western Australia

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Abstract

Cranfield, R.J. and Keighery, G.J. Logania wendyae (Loganiaceae), a new species from south-west Western Australia. Nuytsia 16(1): 11–14 (2006). Logania wendyae Cranfield & Keighery, a new species endemic to the Jarrah Forest bioregion of south-western Western Australia is described, illustrated and mapped.

Introduction

The new species described here is known only from three collections made in the Argyle and Dardanup forest blocks around Donnybrook in south-western Western Australia. The original collection of this distinctive new species was made in 1996 during a flora survey of Dardanup Forest Block (Keighery et al. 1997).

This taxon was originally considered to represent Logania serpyllifolia subsp. angustifolia (Benth.) B.J. Conn or one of its variants, however, several characters were recognised as different, such as flower size, hairiness of leaves and apparent habitat differences. On this basis, plants from the Donnybrook area are considered to represent a new taxon of Logania sect. Stomandra (R. Br.) DC., described here as L. wendyae.

Taxonomy

Logania wendyae Cranfield & Keighery, sp. nov.

Fruticulus erectus ad 5–17 cm altus. Ramuli teretes, plus minusive sulcati, dense tomentosi. Folia subsessilis, lamina linearis–anguste ellipticus, 9–25 mm longus, 2–5 mm latus. Inflorescentia terminales, 1–3 flores, flores perfecti, pedunculus 0.5–1 mm longus. Corolla 9–12 mm longa, tuibus 4.5–6 mm longus, lobi obovati, 4.5–6 mm longi. Stamina in sinu inter lobes corollae insertae.

Typus: Dardanup forest block [precise locality withheld], Western Australia, 30 Oct. 1996, G.J. Keighery 15011 (holo. PERTH 05121906).
Decumbent dwarf shrub, 5–17 cm high, up to 30 cm wide with a spreading woody rootstock. Branches ridged, moderately to densely hairy, hairs patent to spreading, white, usually 0.2–1 mm long. Leaves discolorous, subsessile, moderately to densely hairy; stipules membranous, triangular, 1.5–3 mm long, apex obtuse to acute; lamina lanceolate to narrowly-elliptic, 9–25 mm long, 2–5 mm wide, moderately hairy, indumentum on all surfaces with long erect hairs mainly on the midrib and margins of the abaxial surface; hairs white, patent, 4–6 mm long; lamina base attenuate, narrowed for basal 2–3 mm; margin recurved; apex acute to subacute. Leaves subtending the inflorescence usually longer (20–25 mm long vs 9–15 mm) and broader (4–5 mm vs 2–4 mm), exceeding the flowers. Inflorescence terminal, triadic or reduced to a single flower, mostly reduced cymose, 1–3 flowered with one flower opening at a time, the remaining two either aborting or opening later; peduncle short, 0.5–1 mm long; flowers bisexual, odour foetid; pedicel 0.5–1 mm long, densely hairy; prophylls linear, 3–4(9) mm long, 0.5–1 mm wide, hairy, apex long-attenuate. Calyx black, outer surface moderate-densely hairy, particularly on margins; lobes narrowly linear to narrowly ovate, 7–10 mm long, 0.5–1 mm wide, margin membranous, apex long-attenuate. Corolla white, tinged with blue, 9–12 mm long; outer surface glabrous, inner surface densely papillose; tube 4.5–6 mm long; lobes obovate, 6–9.5 mm long, 2–3.5 mm wide, apex rounded to subacute. Stamens exserted; filaments inserted in sinus between lobes, 1.5–2 mm long, filiform; anthers 1–2 mm long. Pistil 4–6.5 mm long; ovary 1.5–2 mm long, with sparse glandular hairs; style 3–5 mm long; stigma ellipsoid, 2 mm long, 0.5 mm wide. Capsule ovoid, 5–6.5 mm long, c. 2 mm wide, sparsely hairy. Seed not seen. (Figure 1)


Distribution and habitat. Known from three collections from two forest blocks around Donnybrook in south-western Western Australia. Occurs in Eucalyptus marginata, Corymbia haematoxylon – Allocasuarina fraseriana forest or low woodland on exposed colluvial brown clay to sandy clay soils associated with laterite gravels. (Figure 2)

Phenology. Flowering in October.

Conservation status. Conservation Codes for Western Australian Flora: Priority One. This species is known only from two areas close to the type locality and appears to be restricted to a few individuals in each population, none of which are located in conservation reserves. Additional surveys are required to determine whether this species occurs in the Whicher Range area south of the currently known populations.

Etymology. Named in honour of the first author’s wife Wendy, who has accompanied him often on field work and supported his botanical career.

Notes. The long white hairs of this species are easily observed and mask the leaves, compared to Logania serpyllifolia subsp. angustifolia, in which the leaves are sparsely hairy (Figure 1). Many of the specimens of L. serpyllifolia subspecies angustifolia examined have darkened almost to black, a feature common in Logania. This darkening has not been observed in samples of Logania wendyae.
R.J. Cranfield and G.J. Keighery, *Logania wendyae* (Loganiaceae), a new species


Figure 2. Distribution of *Logania wendyae* (★).
Amendment to the “Flora of Australia” key.

To allow recognition of *L. wendyae*, the key in the “Flora of Australia” (Conn & Brown 1996) should be altered to read:

5: Plant low, branching, erect or spreading; corolla 4–13 mm long; calyx lobes tapering, subulate or long-attenuate
7 Inflorescences terminal on short lateral branches, appearing axillary; calyx glabrous, usually with a few minute papillae on midrib of outer surface ...... 27. *L. pusilla*
7: Inflorescences distinctly terminal, not on short lateral branches; outer surface of calyx hairy, particularly medially and marginally
7a Corolla 4.5–8.5 mm long, leaves glabrescent .............................................. 28. *L. serpyllifolia*
7a: Corolla 10–12 mm long, leaves with persistent long white hairs .................... 34. *L. wendyae*

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References
