

Alangium solomonense (Bloemb.) W.J.de Wilde & Duyfjes (Cornaceae), a new species record for Australia and Queensland

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Forster, P.I. (2019). *Alangium solomonense* (Bloemb.) W.J.de Wilde & Duyfjes (Cornaceae), a new species record for Australia and Queensland. *Austrobaileya* 10(3): 545–547. The genus *Alangium* Lam. comprises two species in Australia, viz. *A. polyosmoides* (F.Muell.) Baill. (with two subspecies) and the newly recorded *A. solomonense* known from Cape York Peninsula in Queensland. *Alangium solomonense* has been previously referred to under the phrase name *A. sp.* (Claudie River B.P.Hyland 2682RFK) in Australia. A key is provided to the Australian species of *Alangium*.

Key Words: Cornaceae; *Alangium*; *Alangium solomonense*; *A. sp.* (Claudie River B.P.Hyland 2682RFK); Australia flora; Queensland flora; new species record; identification key

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Introduction

The genus *Alangium* Lam. is widespread in Africa, Asia, Malesia, Melanesia and Australia where it occurs south to around Canada Bay in New South Wales. In Australia, a single polymorphic species *A. villosum* (Blume) Wangerin has been long recognised, with two subspecies (*A. villosum* subsp. *polyosmoides* (F.Muell.) Bloemb. and *A. villosum* subsp. *tomentosum* (F.Muell.) Bloemb.) that were considered endemic to Australia (Bloembergen 1939; Hewson 1984). This conservative single species view of the classification of the Australian taxa remained stable for over 40 years, until the recognition of a third taxon (Hyland 1982; Hyland & Whiffin 1993; Hyland *et al.* 1994; Jessup 1997; Cooper & Cooper 2004) with the collection *Hyland 2682RFK* used as the standard for a phrase named entity. The third taxon has been considered to only occur on Cape York Peninsula and was first collected in 1962 by Len Webb and Geoff Tracey, at which time it was identified as *A. villosum* subsp. *polyosmoides* by Lindsay Smith and Tracey. Hewson (1984) stated that *A. villosum* subsp. *polyosmoides* was widespread in eastern Australia, extending to Cape York

Peninsula although no specimens were cited from that region.

In the account of *Alangium* section *Rhytidandra* Bloemb. by de Wilde & Duyfjes (2017), the Australian taxa formerly classified under *A. villosum* were reclassified as two subspecies of *A. polyosmoides* (F.Muell.) Baill. While reviewing this classification it became evident that *A. sp.* (Claudie River B.P.Hyland 2682RFK) was synonymous with *A. solomonense* (Bloemb.) de Wilde & Duyfjes, so this is formally dealt with in this short paper, together with notes on its occurrence and habitat in Australia.

Materials and methods

This paper is based on herbarium collections at the Queensland Herbarium (BRI), online images of type specimens and field observations by the author. In the specimen citations National Park is abbreviated as NP.

Taxonomy

Alangium solomonense (Bloemb.) W.J.de Wilde & Duyfjes, *Blumea* 17: 81 (2017); *A. villosum* subsp. *solomonense* Bloemb., *Bull. Jard. Bot. Buitenzorg* Ser. 3, 16: 207 (1939). **Type:** Solomon Islands. Santa Ysabel Island, Sigana, 12 January 1933, *L.J. Brass 3463* (lecto: BO *n.v.*, *fide* de Wilde & Duyfjes 2017: 81; isolecto: A image!; BRI).

Alangium sp. (=RFK/2682); Hyland (1982); Hyland & Whiffin (1993).

Alangium sp. (Claudie River B.P.Hyland 2682RFK); Hyland *et al.* (1994: 300); Jessup (1997: 13; 2002: 13; 2007: 53; 2010: 48; 2018); Australian Tropical Rainforest Plants (2019).

Alangium sp. (Claudie River); Cooper & Cooper (2004: 13).

Illustrations: Hyland (1982); Hyland & Whiffin (1993); Cooper & Cooper (2004: 13); Australian Tropical Rainforest Plants (2019).

A detailed species description is available online (de Wilde & Duyfjes 2017: 81).

Additional specimens examined (Australian occurrence only): Queensland. COOK DISTRICT: 1 km SW of King Park Ranger Station, Claudie River, Apr 1992, *Fell DF2506* (BRI; CNS *n.v.*); Claudie River, Oct 1972, *Hyland 2682RFK* (BRI; CNS *n.v.*); *ibid*, Jul 1978, *Hyland 3814RFK* (BRI; CNS *n.v.*); In the middle where Claudie River and Scrubby Creek meet, 6.5 km N of King Park Ranger Station, May 1990, *Fell DF2101* (BRI; CNS *n.v.*); West Claudie River Scrub, Jul 1993, *Forster PIF13559 et al.* (BRI); West Claudie River, 11.4 km WNW of Lockhart River Community, Mar 1994, *Fell DGF4159 & Stanton* (BRI; NSW *n.v.*); Iron Range NP, S of West Claudie River crossing off Iron Range Road, Sep 2008, *Ford 5429 et al.* (BRI; CNS *n.v.*); Rocky River, Oct 1969, *Webb & Tracey 9374* (BRI); McIlwraith Range, NE of Coen, in 1962, *Webb & Tracey 7316* (BRI); Head of Temple Creek, Cape Melville NP 4, May 1994, *Fell DGF4337* (BRI; CNS *n.v.*); 0.34 km N of junction of McIvor Road and road W to Battle Camp Road, on

road to Cape Flattery, Nov 1989, *Jessup GJD3042 et al.* (BRI); McIvor River Crossing, N of Cooktown, Oct 1986, *Sankowsky 553 & Sankowsky* (BRI); Mt Webb, NP 203, c. 15 km NW of McIvor River mouth, Feb 1992, *Fell DG2474 & Jensen* (BRI; CNS *n.v.*); Mount Webb NP, 15 km NW of the McIvor River mouth, Cape York Peninsula, Dec 1992, *Fell DGF2797* (BRI). CULTIVATED: Hutton Drive, Tolga (ex Claudie River area), Apr 2004, *Ford AF4301* (BRI); Long Pocket (ex Massy Creek Road), Jan 1965, *Tracey 15244* (BRI); Tolga (ex McIvor River), Jul 1990, *Sankowsky 1104 & Sankowsky* (BRI; DNA *n.v.*).

Distribution and habitat: *Alangium solomonense* occurs in the Solomon Islands, Papua New Guinea (Bougainville only) and Australia where it is restricted to Cape York Peninsula north from Mt Cook at Cooktown to the Claudie River near Iron Range. In Australia the plant is invariably restricted to lowland semi-deciduous mesophyll or notophyll vineforests on substrates derived from basalt, granite or schist, often in alluvial or colluvial situations with seasonal flooding.

Typification: When described by Bloembergen (1939) as *A. villosum* subsp. *solomonense*, no holotype as such was listed, rather two syntype collections by Brass (3463 and 3082, both with duplicates at B and L) were listed. The excellent flowering and fruiting collection Brass 3463 was selected by de Wilde & Duyfjes (2017) as the lectotype for this name. An isolectotype is present at BRI.

Key to the Australian species and subspecies of *Alangium* (largely derived from de Wilde & Duyfjes 2017)

- 1 Corolla in bud \leq 8 mm long (Cape York Peninsula from Mt Webb north . . . **A. solomonense**
1. Corolla in bud \geq 9 mm long (Australia, S of Cape York Peninsula) **2**
- 2 Indumentum comprising trichomes 0.1–0.5 mm long, glabrescent; internodes glabrous **A. polyosmoides** subsp. **polyosmoides**
2. Indumentum comprising trichomes (0.3–)0.5 mm long, persistent; internodes pubescent hairy **A. polyosmoides** subsp. **tomentosum**

Acknowledgement

Thanks to Gordon Guymer for commenting on the manuscript.

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