

## SHORT COMMUNICATION

### ***Asterolasia elegans* (Rutaceae), a new species from the Sydney region**

In 1979 a single, flowering specimen of *Asterolasia*, collected by Bill May near Maroota was submitted to the herbarium for identification. His letter noted, 'It occurs as a fairly extensive patch of thin shrubs from three to six feet tall . . .' On 25 August 1989, the population was located and flowering specimens collected. A further visit was made on 29 November 1989 to obtain mature fruiting specimens. Examination of the recently collected material has shown that it does not belong to any previously described species.

#### ***Asterolasia elegans* L. McDougall & M.F. Porteners, sp. nov.**

Frutex elatus, gracilis, erectus ad 3 m altus, tomento stellato, albo et ferrugineo, persaepe denso, omnino vestitus, ramis teretibus usque ad angulum 45° abeuntibus. Folia alterna, petiolata, lanceolata vel anguste lanceolata, acuminata, leniter obliqua, ad 13 cm longa, ad 25 mm lata; pagina adaxialis atrovirens, indumento stellato albo et ferrugineo, costa depressa; pagina abaxialis pallide viridis, albo-stellato-tomentose vestita, costa elevata, ferrugineo-stellato-tomentosa. Margines foliorum integrae, leniter irregulatimque undulatae, vix recurvatae, ferrugineo-stellato-tomentosae. Petioli usque ad 15 mm longi, dense ferrugineo-stellato-tomentosi. Flores albi, 1–9, in fasciculis axillaribus vel terminalibus dispositi. Pedicelli ad maturitatem usque ad 18 mm longi crescentes. Petala patentia, elliptica ad 14 mm longa, in alabastro valvata, intus glabra, extus dense albo-stellato-tomentosa, alba. Stamina 10, conspicua, glabra, c. 7 mm longa, antheris aureis. Fructus ad maturitatem albo- et ferrugineo-stellato-tomentosus. Cocci 9–10 mm alti, apice constricto. Semina c. 3 mm longa, 2 mm lata, late oblonga.

HOLOTYPE: NEW SOUTH WALES: Central Coast: near Maroota, L. McDougall 122, 25 Oct 1989 (NSW 220462). ISOTYPES: PERTH, CANB, K, MO.

Tall, slender, erect shrub to 3 m high, covered with white, brown and rusty stellate tomentum. Newer growth of branches, petioles and bracts densely rusty-red tomentose. Branches terete. Leaves alternate, petiolate, lanceolate to narrowly lanceolate, acuminate, slightly oblique, 4–13 cm long, 9–25 mm wide. Upper surface dark green, with white and rusty stellate hairs, the mid-vein depressed. Lower surface light green, densely white and rusty stellate-tomentose with mid-vein raised. Leaf margins entire, slightly and irregularly undulate, scarcely recurved. Petioles to 15 mm long, densely rusty stellate-tomentose. Flowers 1–9, in axillary or terminal clusters. Pedicels continuing to lengthen until maturity of fruit, to 18 mm long. Calyx vestigial. Petals 5, white, widely spreading, elliptic, 8–14 mm long, valvate in bud, densely white stellate-tomentose outside, glabrous inside. Stamens 10, conspicuous, glabrous, c. 7 mm long; anthers yellow, c. 2.5 mm long. Gynoecium 5-carpellate, densely covered with white stellate tomentum; style glabrous, c. 0.5 mm diam., c. 4 mm long, attached below sterile apex on adaxial side of each carpel; stigma lobed, c. 1 mm diam. Fruit covered with white and rusty stellate tomentum. Cocci 9–10 mm long, constricted at the apex. Seeds c. 3 mm x 2 mm, broadly oblong, shiny black, with a white waxy coating, giving the seeds a greyish appearance.

FLOWERING PERIOD: August–October; fruit maturing in November.

RANGE: Only known from one location, north of Maroota, NNW of Sydney, Central

Coast, New South Wales. A similar habitat in adjoining Marramarra National Park was searched; *A. correifolia* was frequent there with *Zieria involuocrata* nearby, but *Asterolasia elegans* was not found.

**HABITAT:** This species occurs in sandy soil with underlying yellow clay on the southern aspect of a steep hillside above a creek in open forest of *Syncarpia glomulifera* and *Eucalyptus piperita* with understorey of wet sclerophyll plants and including a population of the rare species *Zieria involuocrata*.

**CONSERVATION:** Just outside the northern boundary of Marramarra National Park, therefore not protected from possible road widening or other development. Suggested coding 2V, very restricted and vulnerable (Briggs & Leigh 1988).

**NOTES:** David Keith (National Parks and Wildlife Service of N.S.W.) visited the site in October 1989, and counted approximately 200 plants of *Asterolasia elegans*. He also counted approximately 150 plants of *Zieria involuocrata*, coded 2VC, very restricted and vulnerable but represented within a conserved area (Briggs & Leigh 1988).

The new species has previously been referred to in the New South Wales Herbarium as *Asterolasia* sp. nov. aff. *hexapetala* but appears to be more closely related to *A. correifolia*, which occurs in the same region. *A. hexapetala*, a rare species found in Warrumbungle National Park, North Western Slopes, N.S.W., has leaves that are obtuse, 3–5 cm long, more obovate-oblong, paler in colour with much smaller stellate hairs, and the flowers are smaller with petals 7–9 mm long. *A. correifolia* differs from *A. elegans* in being less densely hairy and having leaves 3–9 cm long, obtuse, more ovate, with glabrous upper surface, and flowers approximately one third the size of the new species; petals 5–6 mm long. *A. correifolia* is recorded at Mill Creek, Dharug National Park, about 7 km from the Maroota site (P.G. Richards 34, NSW), and is frequent on sheltered hillsides of Marramarra Creek, about 10 km from the Maroota site (L. McDougall, personal observation).

**SPECIMENS EXAMINED:** Central Coast, New South Wales: all specimens from a site near Maroota: L. McDougall 122, 25 Aug 1989 (NSW); B. May, 23 Sep 1979 (NSW); M. Porteners 96, 29 Nov 1989 (NSW); L. McDougall 139, 29 Nov 1989 (NSW).

This species is named for its elegant appearance when flowering.

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### Reference

Briggs, J.D., & Leigh, J.H. (1988) *Rare or threatened Australian plants, revised edition*. Australian National Parks and Wildlife Service Special publication No. 14.

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