Nigromnia, a new genus of Goodeniaceae

By R. C. Carolin*

Abstract

Nigromnia globosa Carolin, gen. et sp. nov., is described and discussed. Allied to Scaevola sens. str., it is distinguished by an indumentum of simple hairs, yellow flowers arranged in dense clusters, and an ovary containing a single ovule. It is endemic in the Geraldton region of Western Australia.

Nigromnia Carolin gen. nov.

Suffrutices ramosi compacti. Caules tomentosi pilis simplicibus. Folia tomentosa Flores in fasciculis globosis villosis dispositi. Corolla flava palmata lobis aequalis. Stamina epigynia antheris liberis. Ovarium inferius uno loculo unoque ovulo. Fructus desiccatus indehiscens. Semina ellipsoidea testa chartacea. Embryo teres.

Branched, compact shrubs. Stems tomentose-pubescent with mostly simple hairs. Leaves tomentose, entire, petiolate, obtuse. Flowers arranged in globose clusters in the axils of the upper leaves. Bracts densely villous on the inside, oblanceolate to obovate. Bracteoles villous towards the apex and somewhat broader than the bracts, both bracts and bracteoles shorter than the flowers. Corolla yellow, palmate without an anterior pouch, the lobes equal. Stamens epigynous, the anthers free. Ovary inferior, 1-locular with 1 ovule, glabrous or nearly so: style curved below the broad-deltoid indusium. Fruit a dry, indehiscent, inferior, nut crowned by the persistent calyx rim with a single, ellipsoid, scarcely compressed seed surrounded by a chartaceous testa and containing a \pm terete embryo.

Holotype: N. globosa sp. nov., the only species known to date.

Nigromnia globosa Carolin sp. nov.

Suffrutex ad 60 cm altus. Caules tomentosi pilis albis vel cinereis. Folia obovata vel elliptica 3-6 cm longa 1·5-3 cm lata petiolata tomentosa integra obtusa. Flores in fasci culis compactis villosis dispositi. Bracteae obovatae vel oblanceolatae 2 mm longae. Bracteolae obovatae 2 mm longae. Sepala fere obsoleta. Corolla flava palmata 2·5-3 mm longa extus pubescens pilis simplicibus et lobis aequalibus sine alis. Stylus 1·5 mm longus indusio late obdeltoideo 0·5 mm longo. Fructus ellipsoideus 1·8 mm longus seminum unum continens.

Much branched dense shrub about 60 cm high. Stems tomentose-pubescent with mostly simple hairs which are whitish but becoming grey with age. Leaves obovate to elliptic, 3-6 cm long, 1·5-3 cm wide, tapering into a short petiole and a ± broadened base with a conspicuous tuft of silvery villous hairs in the axil, densely tomentose, entire, obtuse. Flowers arranged in dense, villous, globose clusters up to 1·5 cm diam. in the axils of the upper leaves. Bracts obovate to oblanceolate, 2 mm long, 0·5-0·8 mm wide, densely villous inside with long hairs. Bracteoles obovate, 2 mm long, 1 mm wide, densely villous towards the apex. Sepals almost obsolete and represented by a minute ± lobed rim on the ovary. Corolla yellow, palmate but forming a short complete tube near the base, 2·5-3 mm long, pubescent with mostly simple hairs outside and a few multi-cellular and glandular ones, villous inside with numerous retrorse simple hairs; lobes equal, deltoid, 0·5-0·8 mm long, 0·3-4 mm wide, acute, without a wing. Stamens with filaments irregularly connate,

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ca. 1 mm long; anthers ca. 0.5 mm long. Style 1.5 mm long, pubescent; indusium broad-deltoid, 0.5 mm long, 1 mm wide, light brown, pubescent towards the base on the upper surface but almost glabrous below with a slightly curved orifice beset with minute (0.1 mm long) white bristles on both lips. Fruit ellipsoid, 1.8 mm long, 1 mm diam., dark grey, ribbed, containing a single seed.

Typification—HOLOTYPE—Between Yuna and Dartmoor, W. E. Blackall no. 4833, 20 Sept. 1940 (PERTH). The generic name is a latinization of the collector's name and the specific epithet refers to the globular clusters of flowers.

Specimens examined: 25 mi North of Mingenew, S. Carlquist no. 3945, 29 Oct. 1967 (NSW, SYD): 25 miles North of Mingenew, A. S. George no. 9214, 17 Oct. 1967 (PERTH, SYD).

Discussion: The genus must be placed fairly close to Scaevola. In particular, the palmate flower without an anterior pocket and the indehiscent fruit with a seed which is not compressed, indicate this affinity. However, the reduction of ovules to a solitary one in the ovary is unknown in Scaevola sens. str.; those species which have this feature and are placed in Scaevola by Krause (1912), are more correctly placed in Goodenia (Carolin, 1959). Moreover the smooth simple hairs are known in only one species of Scaevola from Hawaii, which is otherwise quite different, and the yellow corolla colour is likewise only known from one complex of tropical Scaevola species which are otherwise quite different. The dense clustering of the very small flowers is unknown in Scaevola.

Distribution: Geraldton Region, Western Australia.

Habitat: in sandy-loam among Acacia—Melaleuca scrub, near a saline flat (George 9214).

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