

## Nigromnia, a new genus of Goodeniaceae

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### 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 fasciculis 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  $\pm$  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  $\pm$  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).

#### Acknowledgements

To Dr. L. A. S. Johnson for checking the latin descriptions and loaning material and the Curator of the Western Australian Herbarium for loaning material.

#### References

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