A SECOND SPECIES OF STEGANANTHERA (MONIMIACEAE) FROM AUSTRALIA*

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SUMMARY

Wilkiea macooraia (Bailey) Perkins is transferred into the genus Steganthera as Steganthera macooraia (Bailey) Endress. The flowers of the species are described for the first time.

The Australian genus Wilkiea (Monimiaceae) is a problematical group, as Johnson (1962) rightly pointed out for the three subtropical species. The same is true for the three or more tropical species from Northern Queensland.

One of these, W. macooraia (Bailey) Perkins, had been transferred by Perkins (1911) from the genus Mollinedia into Wilkiea, based only on observations of a fruiting specimen. This is a questionable procedure as, in this group, the critical generic features are represented by the flowers, and not by the fruits.

A closer inspection of new collections from the type locality has shown that the species belongs to the genus Steganthera. The description of flowers and fruits (fixed in FAA) is based on the following specimens: P. K. Endress, G. Stocker & B. Gray 4280, 4281, 4291, 4292, 4295, Sept. 16, 1977, summit region of Mt. Bellenden Ker, alt. 1600 m.

In Wilkiea at least the female flowers have six or more tepals, the inner ones thickened and glandular (Endress, unpubl.); the male flowers have six or more (rarely four) stamens. In Steganthera the flowers have four tepals (not thickened); the male flowers have four stamens. Steganthera (including Anthobembix, cf. Kanehira & Hatusima 1942) with about thirty species occurs almost without exception in New Guinea. In 1944 the first species for Australia (Northern Queensland) was described as S. australiana White. Thus, S. macooraia represents the second Australian Steganthera species.

Steganthera macooraia (Bailey) Endress, nov. comb. — Fig. 1–7.

Emended and extended description:

Frutex vel arbor parva, glabra, ad 10 m alta. Folia opposita, coriacea, nitida, aromatic; lamina lanceolata, acuta vel breviter acuminata, apice obtusa.

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(5 – )7 – 8( – 9) cm longa, 2 – 3.2 cm lata; petiolo 2 – 3 mm longo, initio rubro. Paria foliorum singula, in ramunculis paribus bractearum singulis vel paucis intercalata. *Flores* dioeci, globosi, ca. 3 mm diametro, mellei; *perigonii lobi* minuti, 4, duobus paribus apice receptaculi inserti; *receptaculum* crassum, intus pilosum. *Flores masculini*: stamina 4, duobus paribus in receptaculo inclusi, filamentis brevibus, pilosis; antheris reniformibus, rima horizontali dehiscentibus. *Flores feminei*: carpella numero variabilis (ca. 10 – 24), glabra, apocarpa. *Fructus*: carpella ovoidea, glabra, carnosa, ca. 1.5 – 1.8 cm longa, ca. 0.8 – 0.9 cm lata, initio viridia, postea purpurescentia; demum nigrescentia (in siccatite minute papillosa); embryo in albumine copioso parvus, radicula elongata. Numerus chromosomatum diploideus = ± 76 (secundum Ehrendorfer *et al.* 1968).

**Distribution**: The area of the species is limited to two ranges in tropical Queensland (Cook District): Bellenden Ker Range, 17°15’ S, 145°50’ E; Great Dividing Range between 17°20’ S, 145°25’ E and 16°10’ S, 145°20’ E.

**Ecology**: Montane rain forest and microphyll vine-fern thicket; alt. 1000 – 1600 m.

Steganthera macooraia is a distinct species. It shares some of its peculiar characters, such as habit, small leaves, few-flowered inflorescences (single flowers instead of cymes in axils of leaves or bracts on leaf shoots) with New Guinea *Steganthera* species of high altitudes, for example *S. myrtifolia* (Smith) Kanehira & Hatusima.
Possibly, these features are due to convergent evolution, as the same syndrome also occurs in higher altitude species of other monimiaceous genera (e.g. *Levieria, Kibara*) and in other families. *S. macooraaia* differs from the other Australian species, *S. australiana*, by its smaller leaves without marginal teeth and the glabrous and one-flowered inflorescences. The *Wilkiea* species differ not only in floral structure, but also in vegetative characters.

The presence of a second species of *Steganthera* in Northern Queensland is a further example for the close floristic relationships of the Northern Australian and the New Guinea rain forests. More and more genera and species are being detected, which are common to both regions (e.g. Hoogland 1972, Webb & Tracey 1972, Hyland 1973, Hyland & van Steenis 1973, Leenhouts 1978).

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LITERATURE