HYBANTHUS STELLARIOIDES NEW COMBINATION (VIOLACEAE),
A WIDESPREAD SPECIES FROM EASTERN AUSTRALIA AND
PAPUA NEW GUINEA

PAUL I. FORSTER

ABSTRACT
Forster, Paul I. Hybanthus stellarioides new combination (Violaceae), a widespread species from Eastern Australia and Papua New Guinea. Muelleria 8(1): 17–19 (1993). — Hybanthus stellarioides is newly recognised at specific rank, based on H. enneaspermus var. stellarioides Domin. It is widespread in coastal and subcoastal areas of eastern Australia in New South Wales and Queensland and has been recorded once from southern Papua New Guinea.

INTRODUCTION
A taxonomic revision of the genus Hybanthus Jacquin in Australia was presented by Bennett (1972), and adapted with little change for a 'Flora of Australia' treatment by George (1982). In both of these accounts, H. enneaspermus (L.) F. Muell. is considered to comprise two subspecies, with subsp. enneaspermus widely distributed in subtropical and tropical Australia, Malesia, Asia and Africa whereas the subsp. stellarioides (Domin) E. Bennett is endemic to eastern Australia.

Bennett (1972) separates the two subspecies with the following key:

- 1. Stipules long (up to 4 mm). Margins of leaf closely revolute, usually glabrous, but if pubescent then hairs spreading. Flowers blue ........ subsp. enneaspermus
- 1. Stipules short (±1 mm). Margins recurved, leaves up to 5 mm wide, hairs always antrorse. Flowers yellow .................................. subsp. stellarioides

H. enneaspermus subsp. stellarioides is based on H. enneaspermus var. stellarioides Domin, described from a plant collected by Domin at Yarraba near Cairns in north Queensland.

To some extent, the recognition and rank of taxa of plants remain subjective. Some taxonomists now recognise 'species' on as little as single-character discontinuity, whereas others prefer three or more. Where subspecies are recognised, there should be allopatry of the taxa concerned.

In the case of the two subspecies of H. enneaspermus, there are four reliable discontinuities in morphological characters, namely the key characters of Bennett (1972). Although both Bennett (1972) and George (1982) map the two subspecies and provide a verbal description of distribution, no information is given as to the ecological preferences of the taxa or as to whether or not they occur as allopatric entities and whether or not they intergrade.

By and large H. enneaspermus subsp. enneaspermus and H. enneaspermus subsp. stellarioides are sympatric, although generally allotypic throughout the area of eastern Australia where both occur. H. enneaspermus subsp. enneaspermus is commonly found in coastal areas often near the sea, although it is also common in rocky areas in eucalypt dominated communities in subcoastal areas and over much of northern tropical Australia. By comparison, H. enneaspermus subsp. stellarioides is common in sandy areas in eucalypt dominated communities from coastal to subcoastal areas. It is rare to see the two taxa growing together; however, I have seen and collected both in close proximity in the Embley Range area in Cook District, Mt Aberdeen in North Kennedy District and the Didcot area in Wide Bay District. No intermediates occur in the areas where the taxa coexist.

*Queensland Herbarium, Meiers Road, Indooroopilly, Queensland, Australia 4068.
Given the lack of intermediates and the relatively high number of morphological discontinuities between the two, it is concluded that both taxa should be recognised at specific level and the relevant change of status for *H. stellarioides* is made.

**TAXONOMY**

*Hybanthus stellarioides* (Domin) P. Forster *comb. et stat. nov.*


Annual herb to 30 cm high. **Stems** with scattered to sparse, antrorse to divericate simple trichomes. **Leaves** alternate, subsessile; lamina linear, linear-lanceolate or elliptic-ovate, 12–80 mm long, 2–8 mm wide, discolorous, entire or with occasional marginal tooth; venation obscure, with scattered to sparse trichomes; margins recurved, never revolute. **Stipules** linear, 0.8–1 mm long; venation obscure. Flowers solitary in leaf axils; peduncle filiform, 3–13 mm long, glabrous or with scattered indumentum; bracts triangular, 0.6–1 mm long, c. 0.3 mm wide; pedicels 2–4.5 mm long, with scattered to sparse indumentum. **Sepals** lanceolate-ovate, 2.5–4.5 mm long, 0.8–1.2 mm wide, glabrous or with scattered trichomes. **Corolla** orange; anterior petal spathulate, 10–14 mm long, 3–9.5 mm wide; outer lateral petals linear-oblanceolate, 3–4.2 mm long, 1.3–1.5 mm wide; inner lateral petals lanceolate-falcate, 4.5–5 mm long, 1.8–2.2 mm wide. **Filaments** filiform, dimorphic, 3 posterior ones short, 2 anterior ones equal in length to anthers and with hairy-tipped nectaries; **anthers** elliptic-oblanceolate, 0.7–0.8 mm long, c. 0.5 mm wide. **Capsule** 5.5–7.5 mm long, 3–6 mm diameter; seeds 5–10, ovoid-ellipsoid, 1.8–2.2 mm long, 1.2–1.4 mm diameter, usually longitudinally ribbed and ± pitted between the ribs, yellow.

**Distribution and Conservation Status**

Widespread in subcoastal and coastal eastern Australia, from central New South Wales more or less continuously in subcoastal and coastal eastern Australia northward to near Cairns. There are a few apparently disjunct collections on Cape York Peninsula and one collection from southern Papua New Guinea.

The species is very common and not rare or threatened.

**Habitat**

*H. stellarioides* grows in sandy or rocky soils of various types in eucalypt-dominated open forests from near sea level up to 500 m altitude. Flowering plants are most noticeable in late summer and autumn, with seeding occurring from autumn onwards. In most instances the plants appear annual, as opposed to *H. enneaspermus* which appears to be at least biennial.

**Representative Specimens** (66 specimens examined)


Queensland — Cook District, Iron Range, 11 June 1948, L.J. Brass 19128 (BRI); Northern base Round Mt, Embey Range, 13 June 1992, P.I. Forster 10458 & T. Kenning (BRI); Turtle Beach, Lizard Island, 7 Oct. 1988, G.N. Batinoff 10341 (BRI); North Kennedy District, Mt Aberdeen National Park, 29 May 1992, P.I. Forster 10005 et al. (BRI); “Taravale” near Hell Hole Creek, 22 Mar. 1987, B.R. Jackes 8711 (BRI); South Kennedy District, Horseshoe Bay, Keswick Island, 36 km NE of Mackay, 26 Mar. 1989, G.N. Batinoff 11099 (BRI); Peak Downs Highway, 17 km W of Moranbah turnoff, 26 Mar. 1989, I. Champion 436 (BRI); Leichhardt District, Salvator Rosa National Park, 28 Mar. 1983, M.E. Ballingall 999 (BRI); Blackdown Tableland, c. 32 km SE of Blackwater (campsite on Mimosa Creek), 24 Apr. 1971, R.J. Henderson 816 et al. (BRI). Port Curtis District, Dry Creek close to Forestry Barr...


REFERENCES


Manuscript received 23 April 1992