# Noteworthy Micronesian Plants. 2.

### F. R. FOSBERG and M.-H. SACHET

Department of Botany, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560

The second paper of this series contains new distributional records and taxonomic notes on species of *Portulaca, Connarus, Salomonia, Piriquita, Leucas, Bacopa, Limnophila*, and *Striga* in Micronesia. One new combination is proposed in *Connarus*.

## **PORTULACACEAE**

Portulaca suffrutescens Engelm., Bot. Gaz. 6: 236, 1881.

An unusual plant, collected on Sarigan, June 24, 1966, by Michael Evans, on close examination turned out to be a *Portulaca* not hitherto reported from the Pacific Islands. It is a suffrutescent herb with narrowly linear leaves and flowers in very few-flowered terminal heads.

Study of von Poellnitz' monograph of *Portulaca* (Fedde Repert. Sp. Nov. 37: 240–320, 1934) and Legrand's monograph of the American species of *Portulaca* (An. Mus. Nat. Montevideo 7: 1–147, 1962), as well as comparison in herbaria (US, MO) narrows the choice down to two species, obviously closely similar, but not placed very near each other by the monographers. These are *P. elatior* Mart. ex Rohrb., of northern and eastern South America and the West Indies, and *P. suffrutescens* Engelm. of the southwestern U.S. and Mexico.

Mature flowers, fruits and seeds are lacking in the specimens, so only a detailed comparison of vegetative features makes a choice possible. It fits neither species perfectly but seems closer to *P. suffrutescens* in its less succulent stems, more free branching, rhizomatous underground parts, sparse stipular hairs, and involucral leaves fewer in a whorl. A description is given below, based on the *Evans* collection. More material, especially with capsules, seeds, and notes on the characters of open flowers, is greatly needed to complete the description and confirm or change this tentative identification.

Diffusely branched plant, more or less rhizomatous, stems suffrutescent, slender, not notably fleshy, a number from the base, loosely branching near top, to 35 cm long, pink, said by the collector to be depressed; leafy; leaves linear, bright green above, lighter beneath, terete, 15–20 (–25) mm long, pointed but not especially sharply so, colorless base only obscurely petiolate or even somewhat dilated, stipular hairs relatively few, involucral leaves 4–6, similar to foliar leaves but dilated at base; inflorescences, excluding involucral leaves, 3–6 mm wide, scarious bracts broadly

ovate, 3-4 mm long, somewhat acuminate or mucronate, carinate, buds only 1-2, these ovoid acuminate, 3-4 mm long; no flowers or fruits available.

The material of this species in the U.S. National Herbarium has been, by someone, referred to *P. stelliformis* Moç. & Sessé. In the Index Kewensis the reference to this species is ex D.C. Prodr. 3: 353, 1838. However, there is no description of this species in the Prodromus, only "in icon. fl. mexic. ined. video speciem huic similliam *P. stelliformem* dictam" with no direct mention of Moçino and Sessé. This does not seem to be adequate to validate publication of the name. We have not been able to locate a subsequent publication of *P. stelliformis*. Until such is located with the necessary description or reference to a published description, *P. suffrutescens* seems to be the correct name.

MARIANAS ISLANDS: SARIGAN ISLAND: village and vicinity, frequent on cultivated ground, 10-50 m, June 24, 1966, Evans 2435 (US, UH, Fo, MO, K).

## **CONNARACEAE**

Connarus semidecandrus Jack, Mal. Misc. 2 (7): 39, 1822; Leenhouts, Fl. Males. I, 5: 534-536, 1958.

A widespread complex species found in southeast Asia and eastward to the Solomon Islands, and Palau. A number of "local races and forms" are distinguished by Leenhouts, but not assigned ranks or given names. The one of these found in the eastern part of the range has long been called *Connarus gaudichaudii* Planch. On the basis of the characters given by Leenhouts it should at least be afforded varietal status.

Connarus semidecandrus var. gaudichaudii (DC.) Fosb., n. comb.

Omphalobium gaudichaudii DC., Prodr. 2: 85, 1825.

Connarus gaudichaudii (DC.) Planchon, Linnaea 23: 429, 1850.

Distinguished by its long-stipitate (6-15 mm vs. 5 mm) and slightly beaked fruits and acute sepals.

Its type locality is Rawak, in the Moluccas.

Palau, ample material examined from most of the larger islands of the group. CAROLINE ISLANDS: PALAU: Babeldaob: Melekiok (as Marikyoku), Mt. Armonogui, Kanehira 514 (NY, FU); Armonogui, near Almaten, Hosokawa 6757 (BISH); Kanehira 2090 (FU); Almaten, Takamatsu 1602 (BISH), 1641 (BISH, US); Ngatpang, Tuyama in 1939 (TI); Ngakurao, Tuyama s.n. in 1939 (TI); Aimiliik (Aimiriik) to Gaspan (=Ngatpang?), Tuyama s.n. in 1937 (TI); Aimeliik (as Eimelijk), Tuyama in 1939 (TI); Kanehira 1919 (FU, US), 2355 (FU); Gakip, 100 ft, Hosaka 3361 (US, BISH, NY, L, Fo); Arakitaoch Stream, 2 mi south of Ngarekeai Village, Airai Mun., Fehlmann s.n. in 1956 (BISH). Ngarakabesang (as Arakabesan): Takamatsu 1259 (BISH). Koror: Blackburn and Bechesrrak E55 (US); Kanehira 81 (FU, NY), 144 (FU, NY), 2074 (FU), 4403 (FU); Ngerbe'edsau, near dock of Babeldaob ferry, 200 m, Fosberg 32314 (US, BISH); in insulis in Sinu Iwayama, Tuyama s.n. in 1939 (TI); coral island, Koror, Kanehira 1894 (US, NY); coral island, Kanehira 2392

(NY, FU), 2464 (NY, FU). Malakal: Malakal Mt. trail, Hardy 56 (US, BISH). West side of southwest peninsula, Urukthapel, 2–10 m, Fosberg 32146. Peliliu: Tuyama s.n. in 1937 (TI); Angaur: s. coll. (TI); Koidzumi s.n. in 1915 (TI).

## **POLYGALACEAE**

Salomonia ciliata (L.) DC., Prodr. 1: 334, 1824; Hosokawa, Tr. N. H. Soc. Formosa 28: 155, 1938.

Polygala ciliata L. Sp. Pl., 705, 1753.

Salomonia cantoniensis sensu Walker & Rodin, Contr. U.S. Nat. Herb. 30: 461, 1949; Stone, Micronesica 6: 362, 1971; non Loureiro, Fl. Cochinch. 14, 1790.

The plants recorded from Guam as S. cantoniensis Lour. by Walker & Rodin seem rather to be S. ciliata, already known from Yap.

The most evident differences are lanceolate (lower ovate) rather than broadly ovate to triangular-cordate leaves, and the lower margins of the spectacle-shaped fruits are not spinulose-ciliate but rather entire or subentire.

MARIANAS ISLANDS: GUAM: East of Mt. Tenjo, 275 ft, Moore 319 (US); between Ylig and Pago Rivers west of Yona, Steere 26 (US), 27 (US).

CAROLINE ISLANDS: YAP: Atelieu, *Tuyama* s.n. in 1939 (FU); 0.5–1 km s.w. of Tora Village, near east coast, 30 m, *Evans 282* (US).

## TURNERACEAE

Piriquita ovata (Bello & Esp.) Urb., Jahrb. K. Bot. Gard. Berl. 2: 76, 1883.

Turnera ovata Bello & Espinal, An. Soc. Esp. Hist. Nat. 10: 275, 1881.

This is a tropical American species, apparently native to the West Indies, recently introduced in Palau. It has the habit and appearance of a *Sida*, but the flowers are very different, with 5 stamens and a 1-celled ovary with parietal placentation.

CAROLINE ISLANDS: PALAU: Babeldaob: Nekken, road from dock to Forestry Station, Nov. 23, 1968, Salsedo 95 (US).

## **LABIATAE**

Leucas lavendulifolia J. E. Smith in Rees, Cyclopaedia 20 (2): unpaged, 1819 [=1812].

A bushy, ascending to somewhat sprawling herb with linear to narrowly lanceolate leaves and crowded verticils of white tubular bilabiate flowers. It occurs from India to Java and the Philippines and has not previously been reported from Micronesia. Possibly introduced with air traffic.

CAROLINE ISLANDS: PALAU: Babeldaob: old Airai Village, near end of airstrip, May 4, 1969, Salsedo 164 (US).

## SCROPHULARIACEAE

Bacopa procumbens (Mill.) Greenm., Field Col. Mus. Bot. Ser. 2: 261, 1907.

Bacopa chamaedryoides (H.B.R.) Wettst.

In addition to the report from Guam (Stone, Micronesica, 2: 141, 1966), and that from the Caroline Islands on Ponape (Glassman, Bish. Mus. Bull. 101, 1952), this plant occurs on Moen I., Truk. It can be distinguished from *B. monnieri* by its yellow flowers, non-fleshy stems, and serrate, somewhat pointed leaves. It is widely distributed in Tropical America. The following specimens from Micronesia have been seen by us:

MARIANAS ISLANDS: GUAM: Lasaguas River, Apra Harbor, Stone 4674 (UG). CAROLINE ISLANDS: TRUK: Moen Island, Rainey 39 (Fo). PONAPE: Agricultural Experiment Station Grounds [Colonia], Glassman 2555 (US, BISH); Colonia, Stone 1960 (UG).

Limnophila aromatica (Lam.) Merr., Int. Rumpf. Herb. Amb. 466, 1917.

A weak, very fistulose plant with tubular, subsalverform lavender flowers, not recorded previously from Palau. It differs from the similar *L. fragrans* in the pedicellate rather than sessile or subsessile flowers. It has been collected widely in southern and eastern Asia and Malesia.

CAROLINE ISLANDS: PALAU: Babeldaob: Marikyoku, (Melekiok) Kanehira 2053 (NY). Koror: Ngerbeched, in very moist area, June 11, 1969, Salsedo 206 (US).

Striga lutea Lour., Fl. Cochinch. 22, 1790.

A small erect herb, sparsely branched, minutely hirsute, with usually alternate very small oblong blunt leaves, terminal spikes of white bilabiate flowers with slender curved corolla tube, compressed capsules of tiny yellowish-brown seeds.

This is apparently the first record of the genus *Striga* from Micronesia. It is usually parasitic on grasses. The host of this collection was not recorded, but the plants were growing in a grassy field on volcanic soil. The collection was made in 1950 and no further material has been sent in, though much collecting has been done since. The Palauan name given by informant Alkong was "Ngauldrutha".

CAROLINE ISLANDS: PALAU: Koror Island, Ngerbe'edesau, near dock of Babeldaob ferry, 10 m, *Fosberg 32316* (US, UH, Fo, K).