

original sense cannot be adequately separated from *Clinostigma* and must, therefore, be replaced by the older name.

Distribution of *Clinostigma* as understood at present is limited to the Fiji Islands with 3 species (\*), New Hebrides with 1 species, Samoa with 5 or 6 species, Carolines with 2 species and the Bonin Islands with 1 species. The three species in Micronesia are distinguished as follows:

1. Fruit about 6 mm. high: flowers borne in triads in the lower two-thirds to four-fifths of the rachillæ, paired ♂ above..... *C. Savoryana*
1. Fruit 15-22 mm. high: flowers borne in triads in lower one-third to one-half of the rachillæ, paired ♂ above.
  2. Fruit strongly compressed and ridged laterally, 18-22 mm. high. . . . *C. ponapensis*
  2. Fruit not or only slightly compressed and ridged laterally, 15 mm. high. . . . *C. carolinensis*

† *Clinostigma carolinensis*, (Becc.) comb. nov. Fig. 136C.

*Cyphokentia? carolinensis*, Becc. in Engler Bot. Jahrb. lii, 4 (1914).

*Bentinckiopsis carolinensis*, (Becc.) Becc. in Webbia, v, 113 (1921), in Engler Bot. Jahrb. lix, 16 (1924), in Nuov. Giorn. Bot. Ital. n.s. xlii, 32 (1934), and ex Martelli, in Atti. Soc. Tosc. Nat. Pisa Mem. xlv, 165 (1934); Martelli, in Nuov. Giorn. Bot. Ital. n.s. xli, 714 (1934); Burret, in Notizbl. Bot. Gart. Berlin, xii, 593 (1935), xv, 88 (1940); Krämer in Thilenius, Ergebnisse der Südsee Expedition 1908-1910, IIB, 5, Truk 419 (1932); Kanehira, in Bot. Mag. Tokyo, xiv, 274 (1931) partim, Fl. Micr. 73 (1933); Kanehira & Hatusima, in Bot. Mag. Tokyo, liii, 189 (1939).

*Exorrhiza carolinensis*, (Becc.) Burret, in Fedde Repert. xxiv, 296 (1928); Kanehira, in Journ. Dept. Agr. Kyushu Univ. iv, 284 (1933), in Bot. Mag. Tokyo, xlv, 274 (1931), xlvi, 731-2 (1934), in Journ. Jap. Bot. xii, 635 (1936); Hosokawa, in Bull. Biogeogr. Soc. Japan, vii, 184 (1937).

*Scyphokentia Krämeri*, Volkens ex Krämer in Thilenius, Ergebnisse der Südsee Expedition 1908-1910, IIB, 5, Truk 419 (1932) in syn.

Tree 12-15 m. tall, trunk to 25 cm. thick near top: leaves large, rather straight, 3-5 m. long, pinnæ numerous, equidistant, alternate, up to 86 (-100) cm. long, to 3.5 cm. wide, linear, with a long-attenuate entire apex which splits and becomes bifid when frayed, attached to rachis by a rather oblique V-shaped base, the distal half somewhat decurrent on the rachis, rigidly chartaceous: inflorescence up to 75 cm. long; peduncle short, 55 mm. wide, 25 mm. long, groups of flowers numerous, 1-2 mm. apart on rachilla, subtended by acute processes, the apices of which tend to be reflexed especially distally on the rachilla, sterile tips of rachillæ filiform,

\* The following transfer is required.

† *Clinostigma Smithii*, (Burret) comb. nov.

*Exorrhiza Smithii*, Burret, in Bernice P. Bishop Mus. Occ. Papers, 11 (4), 3 (1935).

flexuous, flowers in triads in lower half or third, paired staminate ones above: staminate flowers 3-3.5 mm. long, ovoid, asymmetric, bluntly acute, sepals 1.5 mm. high, petals 2.7-3 mm. high, 1.2-1.5 mm. wide; pistillate flowers ovoid, sepals 2.5-3 mm. high, outer 5 mm. wide flattened out, about the same in fruit but indurate, petals 3 mm. high, 3-5 mm. in fruit, pistil 2.5 mm. high: fruit broadly oblong, rounded at ends, 15 mm. long, 11 mm. wide, 9 mm. thick, smooth, obscurely granulose when dry, base enclosed in perianth-cup, stylar tubercle and stigma lateral, borne below middle, 5-7 mm. above base, tending to point upward, exocarp separable from mesocarp, mesocarp about 1 mm. thick, thicker on side bearing stylar tubercle, endocarp very thin, hard, brittle, shiny within; seed oblong, rounded at ends, 11-12 mm. long, 6-7 mm. wide, terete, attachment just below stylar tubercle in fruit, just above base of seed, vascular strands in seed-coat 8-10 on a side, arching upward and backward from very short raphe, descending on back of seed and very slightly anastomosing and entering a darker disk surrounding micropyle which is basal.

Caroline Islands. Truk: Fefan, upper altitudes on Mt. Ibal, *T. Hosokawa 3371* (FU, A, TI); Tol, at upper altitudes, *Hosokawa 8284* (FU); Natu-sima August 1933, *Truk District Office (Kanehira's) 3724* (FU, TI); Moen, ridge east of Moen Village, 110 m., November 22, 1949, *D. Anderson 794* (seedlings only) (BH, BISH, US). [Type *Kraemer* in 1910, from Truk, not seen, *Ledermann* in 1914, on which much of *Beccari's* description was based not seen]. Native name "Kiniau," "Gilian," or "Tiniau" (acc. *Kraemer*), "Kiriyaui" acc. *Kanehira*.

Endemic to Truk, found in the few remnants of primary forest on Truk, and persisting even on open slopes and ridges at rather low altitudes, always on volcanic soil. Available material of this species is very inadequate, consisting only of several detached panicle-branches with flowers and fruit, a segment of a leaf, and some very young seedlings.

† *Clinostigma ponapensis*, (Becc.) comb. nov. Fig. 136A.

*Bentinckiopsis ponapensis*, Becc. in *Webbia*, v, 113 (1921), in *Nuov. Giorn. Bot. Ital. n.s. xlii*, 32 (1934), ex *Martelli*, in *Atti Soc. Tosc. Sci. Nat. Pisa Mem. xliv*, 165-167 (1934); *Martelli*, in *Nuov. Giorn. Bot. Ital. n.s. xli*, 714 (1934); *Kanehira*, in *Bot. Mag. Tokyo*, xlv, 274 (1931) partim, *Fl. Micr.* 72, pl. 12, f. g. 1 (1933); *Kanehira & Hatusima*, in *Bot. Mag. Tokyo*, liii, 189 (1939); *Burret*, in *Notizbl. Bot. Gart. Berlin*, xii, 594 (1935), xv, 88 (1940); *Hosokawa*, in *Trans. Nat. Hist. Soc. Taiwan*, xxxiii, 118 (1943).

*Exorrhiza ponapensis*, (Becc.) *Burret*, in *Fedde Repert.* xxiv, 296 (1928); *Kanehira*, in *Bot. Mag. Tokyo*, xlvi, 732 (1934), in *Journ. Dept. Agr. Kyushu Imp. Univ.* iv, 284 (1935), in *Journ.*