

Ptychoraphis microcarpa Becc. in Philipp. J. Sci. 14: 327 (1919); Merr., Enum. Philipp. Fl. Plts. 1: 164 (1922). Type: Camiguin de Misamis Is., Ramos B.S. 14678 (holotype FI, isotype K); **synon. nov.**
Rhopaloblaste microcarpa (Becc.) Becc. ex Martelli in Atti. Soc. Tosc. Sci. Nat. Res. Pisa Mem. 44: 36 (1934), in Nuov. Gior. Bot. Ital. (n.s.) 42: 81 (1935); Salvosa, Lexicon Philipp. Trees 122 (1963).
Heterospathe sp., Moore in Principes 14: 92 (1970).

NEGROS. Dumaguete, Cuernos Mts, *Elmer* 9559 (holotype FI; isotypes BM, K), Kinabkaban River, *Edaño* 7943 (K, PNH); CAMIGUIN DE MISAMIS IS.: Ramos B.S. 14678 (Type of *Ptychoraphis microcarpa* Becc; holotype FI, isotype K).

This species is distinctive among other Philippine species of *Heterospathe* in its elongate-ovoid fruits which are rather closely set along the rachilla. The type of *Ptychoraphis microcarpa* fits well within the range of variation of *H. elmeri*. Moore (1970) earlier referred *P. microcarpa* to *Heterospathe* but refrained from formally transferring the epithet.

Three sheets of the *Edaño* collection cited above, one at K and two others at PNH, have rather unusual divaricate leaflets occurring singly or in 2's and are without the prominent secondary nerves, and the leaf rachis is very densely punctulate scaly abaxially. However, two others sheets of this same collection also at PNH have leaflets typical of *H. elmeri*. In all the five sheets, the fruiting material appears to have come from the same infructescence which clearly belongs to *H. elmeri*.

6. *Heterospathe intermedia* (Becc.) Fernando comb. nov.

Ptychoraphis intermedia Becc. in Leaflet. Philipp. Bot. 8: 3011 (1919), in Philipp. J. Sci. 14: 328 (1919); Merr., Enum. Philipp. Fl. Plts. 1: 164 (1922).
 Lectotype: Mindanao, Agusan Prov., Cabadbaran, Mt Urdaneta, *Elmer* 13663 (chosen by H. E. Moore, Jr. in annot., FI; isolectotypes BM, K).
Rhopaloblaste intermedia (Becc.) Becc. ex Martelli in Atti. Soc. Tosc. Sci. Nat. Res. Pisa Mem. 44: 137 (1934), in Nuov. Gior. Bot. Ital. (n.s.) 42: 81 (1935); Salvosa, Lexicon Philipp. Trees 122 (1963).
Heterospathe sp., Moore in Principes 14: 92 (1970).

LUZON. Sorsogon Prov., Irosin, Mt Bulusan, *Elmer* 14937 (BM, FI, K), *Madulid et. al.* 5188 (PNH), Bulusan Lake, *Fernando* 541 (K, LBC), *Pancho* 2502 (CAHP) & 2487 (CAHP); SAMAR: Catubig River, *Edaño* PNH 24753 (K); BILIRAN: Naval, Mt Sayao, *Fernando* 673 (BH, K, LBC), locality not known, *McGregor* B.S. 18907 (FI); LEYTE: Mt Abucayan, *Edaño* B.S. 41694 (K), Ormoc, Mt Janagdan, *Edaño* 2353 (PNH), Baybay, Mt Pangasugan, *Fernando* 651 (K, LBC); MINDANAO: Agusan Prov., Cabadbaran, Mt Urdaneta, *Elmer* 13663 (lectotype of *Ptychoraphis intermedia* Becc., FI; isolectotypes BM, K), Surigao Prov., Mt Kabatuan, *Mendoza & Convocar* 426 (PNH).

As with *Ptychoraphis microcarpa*, Moore (1970) referred *P. intermedia* to *Heterospathe* but also did not formally transfer the epithet. *H. intermedia* is readily recognizable by its tall habit, the glossy, yellowish-green petiole and rachis, the glaucescent leaf sheaths, and the long (to 50 cm) and rather thick

(to 5 mm) rachillae. This species is confined to the eastern portion of the Philippine archipelago and reaches Luzon only up to the southern tip of the Bicol Peninsula following a distribution pattern similar to that of *Areca caliso* Becc. and *Calamus aidaae* Fernando (Fernando, in press).

7. *Heterospathe negrosensis* Becc. in Philipp. J. Sci. 4: 611 (1909), 14: 326 (1919), in Leaf. Philipp. Bot. 8: 3014 (1919); Merr., Enum. Philipp. Fl. Plts. 1: 162 (1922); Martelli in Nuov. Gior. Bot. Ital. (n.s.) 42: 50 (1935); Salvosa, Lexicon Philipp. Trees 105 (1963). Type: Negros, Mt Silay, *Whitford* 1539 (holotype FI).

MASBATE. Aroroy, *Fernando* 390 (K, LBC); SIBUYAN: Mt Giting-giting, *Fernando* 748 (LBC), *Hernaes* 4095 (CAHP); NEGROS: Mt Silay, *Whitford* 1539 (holotype FI), Mt Marapara, *Curran & Foxworthy* F.B. 13639 (FI), San Carlos, Mt Kanlaon, *Hernaes* 3844 (CAHP), Dumaguete, Cuernos Mts, *Elmer* 9439 (BM, FI, K) & 10147 (BM), Mt Malbag, *Edaño* 669 (PNH).

This species is closely similar to *H. philippinensis* but differs in its generally solitary and more robust habit, the stem often reaching more than 3 cm diam., the inflorescence more dense and with longer peduncle. *H. negrosensis* is recorded here for the first time for Masbate and Sibuyan Islands.

8. *Heterospathe philippinensis* (Becc.) Becc. in Philipp. J. Sci. 4: 610 (1909), 14: 326 (1919), in Leaf. Philipp. Bot. 8: 3013 (1919); Merr., Enum. Philipp. Fl. Plts. 1: 162 (1922); Martelli in Nuov. Gior. Bot. Ital. (n.s.) 42: 50 (1935); Salvosa, Lexicon Philipp. Trees 105 (1963); Moore in Principes 14: 92 (1970). Type: Luzon, Albay Prov., *Cuming* 1476 (as to leaf only) (holotype FI; isotype K).

Ptychoraphis philippinensis Becc. in Ann. Jard. Bot. Buitenz. 2: 90 (1885), Malesia 3: 109 (1886), in Webbia 1: 327 (1905).
Rhopaloblaste sp., Benth. & Hook., Gen. Plant. 3: 892 (1883); Vidal, Phan. Cuming. Philipp. 153 (1885).

LUZON. Ifugao Prov., Mt Polis, *McGregor* B.S. 19784 (FI, K), & B.S. 19785 (BM, FI), Banawe, Bayninan, *Conklin & Buwaya* 1027 (K, PNH), *Banlugan et. al.* 224 (PNH); Benguet Prov., Mt Atok, *Merritt* F.B. 18019 (FI), locality not known, *Curran* F.B. 10856 (FI); Isabela Prov., Palanan, *Gutierrez* 61-286 (PNH), Nueva Vizcaya Prov., Imugan, Sta. Fe, *Reyes & Pancho* 1054 (CAHP), & 1065 (CAHP), locality not known, *Ramos* B.S. 8198 (FI); Aurora Prov., Baler, Sierra Madre Mts, *Jacobs* 7887 (K, LBC, PNH), *Fernando* 467 (K, LBC), Aurora Memorial Forest Park, *Fernando* 487 (K, LBC), Ma. Aurora, *Fernando* 564 (K, LBC); Quezon Prov., Nakar, Sierra Madre Mts, *Fernando* 516 (K, LBC), 527 (K, LBC), 710 (BH, K, LBC), & 766 (LBC), Sablang, *Hernaes* 3692 (CAHP), Infanta, *Robinson* B.S. 9358 (BM, FI, K), & B.S. 9443 (FI), Real, Daraitan, *Hernaes* 3608 (CAHP, LBC), *Fernando* 632 (K, LBC), Balete, *Hernaes* 3652 (CAHP); Rizal Prov., Mt Matulid, *Loher* 7054 (FI, K), Montalban, *Loher* 7091 (leaf only) (K); Albay Prov., *Cuming* 1476 (as to leaf only) (type of *Ptychoraphis philippinensis* Becc.; holotype FI, isotype K), Sorsogon Prov., Irosin, Mt Bulusan, *Elmer* 16519 (BM, FI, K), *Sulit* 1951 (PNH), *Edaño & Gutierrez* 250 (PNH); BILIRAN: Mt Suiro, *Sulit* 5473 (PNH);