

Clustering or solitary palm. STEM 2.5-3 m high, to 0.8 cm diam., the distal internodes c. 7 cm, blackish brown, covered in laciniate scales. Leaves c. 9 in the crown, entire; sheath 10-17 cm long, c. 1 cm diam., pale green, distally covered in dense red-brown laciniate scales when young, with or without triangular auricles to 3 mm long and laciniate; petiole absent or to 4.5 cm long, c. 1.5 mm diam., with brown laciniate scales mixed with silvery scales; blade obtriangular, 30-55 cm long, pale green, midrib/rachis 21-43 cm long, lobes 9-17 × 2.3-4.2 cm, main veins 7-17, scattered scales on the midrib and to a lesser extent on the veins, apices 5-15 mm wide and dentate, also dentate on the distal outside margins. INFLORESCENCE interfoliar, yellow to orange, branched to 1 or 2 orders, 33-77 cm long; peduncle 19-60 cm, 2.5-5 mm diam., densely scaly but glabrescent; prophyll 14-37 cm long, 0.5-1 cm wide, borne at 2.5-9 cm above the base of the peduncle, split for the distal 2.5 cm, with scattered scales; peduncular bract deciduous or persistent, inserted at 12-27 from the base of the peduncle, 13–31.5 cm long, split in the distal 4 cm, with scattered scales; rachis 4-16 cm long, glabrous, without or with up to 5 branched, and 4-11unbranched first order branches, the proximal of the branched ones with up to 4 rachillae; rachillae 4-17 cm, with dense triads and dark yellow flowers. Staminate flowers with sepals 1-1.5 x 1-1.4 mm; petals  $2.1-2.5 \times 1.4-1.6$  mm; stamens 6, equal or offset for up to 0.3 mm, filaments 0.8-1 mm long, 0.2-0.3 mm diam., cylindrical with slightly triangular base, anthers 1-1.5 x 0.7-0.8 mm, dorsifixed, versatile, the locules parallel and obtuse; pistillode 0.4-1.1 mm high, 0.3-0.4 mm diam. PISTILLATE FLOWERS with sepals 1–1.2  $\times$  1.2–1.6 mm, ciliolate; petals 2.8–3  $\times$  2.2–2.7 mm, ciliolate?; staminodes 6, 0.3-0.6 mm long; gynoecium 2.8-3 mm high, 1.6-2.7 mm diam. Fruits (young) oblong, incurved, attenuate towards an obtuse apex.

**Note.** Var. *transiens* was separated on the base of the peduncular bract being deciduous, not split at the apex, and beaked, whereas var. *lutea* has peduncular bract remaining, opening only at the apex, not beaked. *Perrier* 12002 has one inflorescence which differs strongly from the others on that specimen and looks very much like that of var. *transiens*, including the stouter prophyll, the deciduous peduncular bract and the inflorescence branched to two orders. *Perrier* 

18391 shows a peduncular bract with a 1 cm long beak, just as in var. *transiens*. We see no reason to uphold the varieties.

Decary 5064 is from Ivohibe: Ifandana, Sept. 1926 (bud), (P), and is very like *D. lutea*. It is 5 m high; the leaf is 62 cm long, with lobes 42 cm long; the inflorescence is branched to 2 orders, with a rachis of 24 cm with 15 branched and 10 unbranched first order branches; rachillae are 5–9 cm long. The staminate flowers are smaller in all dimensions, but they are in bud.

**SPECIMENS SEEN.** Maroantsetra/Antalaha: Masoala Peninsula, Nov. 1912 (fl.), *Perrier* 11940 (P, type of var. *transiens*). Moramanga: Ambatovola, Jan. ?1913 (fl.), *Perrier* 12002 (P, syntype); idem, Jan. 1928 (fl.), *Perrier* 18391 (P, syntype); Andasibe, Anevoke, Nov. 1986 (bud), *Dransfield et al.* JD6421 (K, P, TAN).

## 78. Dypsis betamponensis

A small palm with entire leaves, much-branched inflorescences, and didymous stamens; distinct, and presumably extinct as well. The species name is derived from the type locality.

**DISTRIBUTION.** Only known from a single collection from Betampona.

**HABITAT.** Lowland rain forest; c. 100 m (according to Jumelle & Perrier (1945); the type specimen gives no altitude).

**LOCAL NAMES.** Not recorded. **USES.** Not recorded.



**CONSERVATION STATUS.** Presumed extinct: not seen for seventy years. Betampona has been visited by several palm collectors, including HB, in recent years.

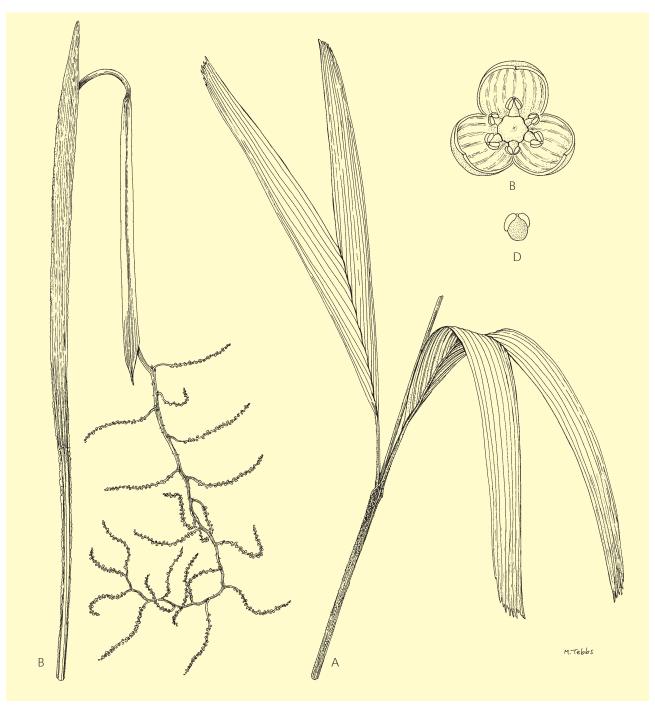
Dypsis betamponensis (Jum.) Beentje & J. Dransf. comb. nov.

## SYNONYM:

**Neophloga betamponensis** Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 6 (3): 33 (1929); Jum. & H. Perrier, Fl. Madagascar 30: 76 (1945). Type: Madagascar, Betampona near Ambodiriana, *Perrier* 17469 (Holotype P).

Small palm to 1 m. **Leaves** entire, with the sheath c. 11 cm long, 6.5 mm diam., with sparse reddish scales and c. 2 mm high auricles; petiole c. 6 cm long, 2.5–3 mm diam., with reddish scales; lamina 49–52 cm long, midrib 21.5 cm, lobes  $30\times5.7$  cm, main veins c. 7,

with lines and bands of reddish scales, apices 0.8-1.8 cm wide, longdentate. Inflorescence c. 63 cm, branched to 1 (2) order(s); peduncle c. 41 cm long, c. 2 mm diam., glabrous; prophyll c. 30 cm long, 1 cm wide, borne at 10.5 cm above the base of the peduncle, with scattered pale brown scales; peduncular bract inserted at c. 30 cm from the base of the peduncle, c. 12 cm long; rachis c. 16 cm long, with sparse long (1-2 mm) red curly hairs, especially in the axils of rachillae, with 1 branched and 22 unbranched first order branches, the branched one with 3 rachillae; rachillae reflexed, 3-5.2 cm, c. 1 mm diam., glabrous, with quite dense triads. **STAMINATE FLOWERS** with sepals imbricate, 0.6–0.8 x 0.8-1.1 mm; petals 0.8-0.9 mm high; stamens 6, biseriate, didymous, the filaments 0.2-0.25 mm long and connate at their bases, anthers 0.2-0.35 mm long and wide, in the type often with 4 fertile, 1 sterile and 1 missing or vestigial stamen; pistillode c. 0.2 mm high. PISTILLATE FLOWERS only known from very young buds, with sepals imbricate, the petals still enclosed within. FRUIT unknown.



**Dypsis betamponensis.** A crown  $\times$  1/2; **B** inflorescence  $\times$  1/2; **C** staminate flower  $\times$  20; **D** stamen  $\times$  30. All from *Perrier* 17469. Drawn by Margaret Tebbs.

**Note.** The didymous stamens are very rare in entireleaved *Dypsis* species, and only *D. catatiana*, *D. fanjana* and *D. singularis* are similar in this respect.

**SPECIMENS SEEN.** Toamasina: Betampona, Dec. 1925 (bud), *Perrier* 17469 (Holotype P).

## 79. Dypsis mahia

This is a very small species with pencil-thin stems. The small, entire leaves with long lobes are very distinct. *Mahia* is Malagasy for 'slender' and refers to the very slender lobes of the lamina which, curiously and most unusually in the genus, are acuminate rather than dentate.

**DISTRIBUTION.** Manombo, only known from the type. **HABITAT.** Lowland rain forest on thin humus layer over rocky soil; c. 60 m.

**LOCAL NAMES.** Not recorded.

Uses. Not recorded.

**CONSERVATION STATUS.** Critical. Known from a single site, which is slowly being destroyed by fire, shifting cultivation and logging.

## Dypsis mahia Beentje sp. nov.

palma minima lobis folii integri longis acutis distincta. Typus: Madagascar, Manombo, *Beentje & Andriampaniry* 4792 (Holotypus K; isotypus TAN).

Solitary or with paired stems. STEMS to 60 cm, c. 6 mm diam; internodes 3-6 mm, glabrous; nodal scars 1-2 mm. Leaves 8-10 in the crown, entire; sheath 5-5.5 cm long, the outer open, the inner closed, pale brown with scattered reddish scales distally, with laciniate edges, without auricles; petiole 5.5-7 cm long, 2-2.5 mm wide, with scattered scales; lamina entire, 34-38 cm long, connate for 5-7 cm, lobed for 80-85 %, the lobes 1.1-1.8 cm wide; main veins 5, with few small reddish scales; apices long-acuminate, not dentate. Inflorescence interfoliar, erect, branched to 1 order; peduncle 15-16 cm long, 1.5-2 mm diam., glabrous; prophyll 11-11.5 cm long, open in the distal 1 cm, with few scattered scales; peduncular bract inserted at c. 8 cm from the base of the peduncle, c. 10.5~cm long, open in the distal 4.5~cm, with few scattered scales; rachis c. 6 cm long, glabrous, with 12 rachillae; rachillae porrect, 3-5 cm long, 0.6 mm diam., glabrous. **STAMINATE FLOWERS** yellow in bud, with sepals  $0.5-0.6 \times 0.5-0.7$ mm; petals 0.7-0.9 × 0.8 mm; stamens 6, uniseriate?, the filaments connate at the base, 0.4 mm long and thin, anthers 0.4  $\times$  0.3 mm,



Dypsis mahia. A crown x 1/4; B detail of rachilla x 3. All from Beentje & Andriampaniry 4792. Drawn by Margaret Tebbs.