



**Dypsis  
poivreana**

2–2.6 × 1.3–1.7 mm; stamens 6, biseriate (offset 0.2–0.3 mm), filaments 0.9–1.7 mm and thin (and occasionally connate for c. 0.2 mm), anthers 1.3–1.8 × 0.4–0.6 mm, versatile; pistillode 0.6–1 × 0.3–0.5 mm, pyramidal. **PISTILLATE FLOWERS** with sepals 1.2–2.2 × 1.6–2.1 mm; petals 3–3.9 × 2.8–3.6 mm; staminodes 0.3–0.9 mm; gynoeceum 2.8–4 × 2–2.6 mm, trifid. **FRUIT** unknown.

**NOTE.** This species slightly resembles *D. digitata* but is distinct in its shorter petioles and closed leaf sheaths; it is close to *D. andapae*, but that species clusters and occurs in high mountains.

**SPECIMENS SEEN.** Fenoarivo Atn.: without precise locality, 1909 (fl.), Geay 9064 (P); Maningory ferry, Jan. 1964 (fl.), Peltier & Peltier 4635 (K, P; some galled flowers present); Tampolo, Feb. 1969 (fl.), Guillaumet 2370 (P).

Central Madagascar, without date (fl., y.fr.), Baron 2323 (K). Without any locality, without date (around 1750?), Poivre s.n. (Holotype P)

## 87. DYPISIS CATATIANA

This is the commonest small palm of the island, occurring in nearly all East Coast forests over a wide altitude range. It would make a good ornamental, with both the entire-leaved form and that with pinnate leaves being handsome, but will require a humid atmosphere. The name refers to the collector of the type, Louis Domingue Maria Catat (1859–?, who collected in Madagascar in 1889).

**DISTRIBUTION.** NE and E Madagascar, between Tsaratanana and Andohahela.

**HABITAT.** Lowland to montane rain forests to bamboo forest, slight to steep mid slope; (150–) 450–1900 m.

**LOCAL NAMES.** *Sinkaramboalavo* (Betsimisaraka); *Varaotra* (Antanosy).



**Dypsis catatiana.** Form with entire bifid leaf, Andohahela (Dransfield *et al.* JD6773)

**USES.** Not recorded.

**CONSERVATION STATUS.** Not threatened. Widespread and common.

**Dypsis catatiana** (Baill.) Beentje & J. Dransf. **comb. nov.**

### SYNONYMS:

*Dypsidium catatianum* Baill., Bull. Soc. Linn. Paris 148: 1173 (1894). Type: Madagascar, Didy forests, *Catat* 1732 (Holotype P).

*Neophloga catatiana* (Baill.) Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 25 (1906); *Palme del Madagascar* 28, fig. 21, t. 27 (1912); Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 6 (3): 20 (1929); *Cat. Pl. Madagascar, Palmae*: 19 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 66, fig. 17 (1945).

*Neophloga indivisa* Jum. & H. Perrier, Ann. Inst. Bot.-Géol. Colon. Marseille sér. 3, 1 (1): 29, fig. 9 (1913). Type: E slopes of Mt Andringitra, R. Ihovika, 1000–1200 m, *Perrier* 11974 (Holotype P).

Solitary small or dwarf palm (*Schatz et al.* 1694 is described as colony-forming, to 1.5 m; *Perrier* 12026 and 15985 are said to be clustering). **STEM** 0.2–1 m high, 4–9 mm diam.; internodes 0.5–3 cm, dark green, often with a vertical pale green stripe; nodal scars 0.1–0.2 cm. **LEAVES** 4–10 in the crown, porrect to spreading; sheath 3–8 cm long, the outermost often open for c. 50 %, pale green with minute brown or reddish scales, in young leaves with clear triangular ligules 3–6 mm long on each side of the petiole; petiole absent or to 5 cm long, 1.5–2.5 mm diam., slightly channelled adaxially; lamina entire or with (2–) 3–5 (–7) pairs of flat leaflets, shiny medium green, slightly paler on the abaxial surface, young leaves reddish; when *entire* shortly bifid, 14–32 cm long, the midrib 10–22 cm



**Dypsis catatiana.** A crown of form with divided leaves  $\times 2$ ; B, C stem and leaf sheaths of form with entire bifid leaves  $\times 2$ ; D staminate flower  $\times 20$ ; E fruit  $\times 2.5$ . A, E from *Beentje* 4428, B - D from *Schatz et al.* 1694. Drawn by Rosemary Wise.

long, the lobes 5–12  $\times$  2–5 cm, with 10–16 main veins, the base cuneate, the apices truncate and dentate, 5–15 mm wide, and dentate on the outside bend, with lines of small reddish and whitish scales on the abaxial midrib and veins; when *pinnately divided* the rachis 9–24 cm long with scattered reddish scales, the individual leaflets flat and at intervals of 1–4.5 cm, the proximal 4–16 (–21)  $\times$  0.5–3 cm and connate for 2–6 cm, the median 8–21  $\times$  0.5–3.5 cm and connate for 0.5–8 cm, both the proximal and the median sigmoid, with acuminate apices and 1–6 main veins, the distal leaflets 5–14  $\times$  1.4–3 cm, connate for 2–6 cm, with 5–6 main veins and the apices dentate on the outside bend, all leaflets with small scales on veins. **INFLORESCENCE** interfoliar, erect or spreading and then porrect, unbranched (a single bifurcation seen once in *Guillaumet* 2161, *Perrier* 11998 and *Humbert* 6891), 9–38 cm long; peduncle 6–27 cm long, 1–2 mm diam., with dense minute scales but glabrescent; prophyll 5–15 cm long, borne at 3–6 cm above the base of the

peduncle, 2.5–4 mm wide, opening only at the apex, pale brown with scattered scales; peduncular bract inserted at 4–14 from the base of the peduncle, 3–9 cm long, 2.5–4 mm wide, opening only near the apex, pale brown with scattered scales; second peduncular bract often present as a tiny, 1.5–4 mm long, briefly tubular bract situated just above the apex of the first peduncular bract; rachilla 2–14 cm long, 1–2 mm diam., yellow-green to pale yellow, glabrous or with dense minute scales all over, with 20–50 distant superficial triads; flowers yellow-green. **STAMINATE FLOWERS** with imbricate sepals 0.7–1 (–1.8)  $\times$  0.6–1 mm, keeled, with membranous margins; receptacle to 0.8 mm high; petals valvate, 1–2  $\times$  0.7–1.3 mm, elliptic, acute, striate; stamens 6, biseriate, didymous, the filaments connate for 0.2–0.4 mm, the antepetalous 0.2–0.5 (–0.8) mm long and narrow, the antesepalous 0.2–0.3 mm and broad, anthers with divergent locules, basifixed, 0.3–0.4 (–0.9)  $\times$  0.25–0.4 (–0.5) mm (with 2 sterile anthers in *Jacquemin* H572J; looking atrophied in JD6774);



**Dypsis  
catatiana**

pistillode 0.2–0.3 mm. **PISTILLATE FLOWERS** with sepals imbricate, 0.8–1.3 × 0.6–1.3 mm, concave, keeled, non-ciliolate; petals proximally imbricate and membranous, distally valvate and fleshy, 1.2–1.8 × 0.9–1.5 mm, concave, elliptic, acute, striate; once (in *Schatz* 1694, a single flower) with a second series of smaller petals inside the outer series, 1.2 mm long; staminodes 6, 0.2–0.4 mm high, from thin to broad and tooth-shaped; ovary 0.8–1.4 × 0.8–1.3 mm, with a low pyramidal stigmatic bump. **FRUIT** deep shiny red, ellipsoid with a slightly pointed apex, 10–15 × 5–9.5 mm; mesocarp c. 2 mm thick, fleshy; endocarp with 22–30 free longitudinal fibres. **SEED** 8.5–10 × 4–5.5 mm, the base pointed, the apex obtuse; endosperm homogeneous. **EOPHYLL** bifid.

**NOTE.** *N. indivisa* was put into synonymy by Jumelle (1929). Northern populations have generally longer peduncles and more glabrous rachillae, but not consistently so.

*Jacquemin* H572J has the staminate and pistillate flowers at almost the same stage of development on a single rachilla, which is most unusual in *Dypsis*. *Guillaumet* 2161 has the stamens larger than in all other specimens studied; the measurements of this specimen are included in the description in brackets.

**SPECIMENS SEEN.** Bealanana: Tsaratanana area, Nov. 1912 (old infl.), *Perrier* 12026 (P); Bealanana to Mangindrano, July 1968 (fl.), *Guillaumet* 2161 (K, P, TAN). Andapa: Andapa to Doana, Andranotsara valley, Oct. 1967 (fl., fr.), *Jacquemin* H572J (P); Marojejy, E of Ambalamanasy II, Dec. 1948 (fl., y.fr.), *Humbert & Capuron* 22119 (K, P); Marojejy, Nov. 1972 (fl.), *Guillaumet* 4037 (TAN), and Dec. 1972 (fr.), *Guillaumet* 4204 (TAN); N slopes of Ambatosoratra, Feb. 1989 (fl.), *Miller* 4257 (TAN). Maroantsetra/Antalaha: Masoala Peninsula, Oct. 1912 (bud), *Perrier* 11948 (P). Ambatondrazaka: Didy forest, Aug. 1889 (fr.), *Catat* 1732 (Holotype P); Zahamena, March 1941 (fr.), *Decary* 16532 (P). Moramanga: Analamazaotra, Sept. 1913 (old infl.), *Perrier* 11996 (P); idem, Dec. 1913 (fr.), *Perrier* 11995 (P); idem, July 1913 (bud), *Perrier* 11998 (P) and 11999 (P); idem, 1912 (fl.), *Viguiet & Humbert* 1084 (P); idem, March 1991 (fr.), *Beentje & Raharilala* 4410 (BH, K, MO, TAN); Anranumenabe, Nov. 1986 (bud), *Dransfield et al.* JD6434 (K, TAN); Maromizaha, Feb. 1926 (fr.), *Perrier* 15985 (P);

S of Moramanga, Feb. 1930 (fr.), *Decary* 7106 (P), 7161 (P). Anosibe an'Ala: Sandrangato, Dec. 1954 (fl.), *Descoigns* 122a (TAN). Ambositra: Ranomena, July 1992, *Beentje* 4739 (K, MO, TAN). Ifanadiana: Ranomafana, Jan. 1964 (fr.), *Bosser* 18916 (P); idem, Oct. 1987 (fl.), *Schatz et al.* 1693 (P, TAN) and 1694 (K, P, TAN); idem, March 1991 (fr.), *Beentje* 4428 (K, TAN), 4429 (BH, K, MO, P, TAN); idem, Vatoranana to Maharira, March 1992 (fr.), *Malcomber & Rakoto* 1326 (K, P). Ivohibe: Ihovika R. (dead infl.), *Perrier* 11974 (P, type of *N. indivisa*). Midongy Atsimo: 24 km S of Midongy, May 1992 (fr.), *Beentje & Andriampaniry* 4669 (K, MO, P, TAN). Befotaka: Mt. Papango, Dec. 1928 (fl.), *Humbert* 6891 (P, TAN). Tolanaro: summit of Marosoui (Marosohihy), Nov. 1928 (bud), *Humbert* 6624 (P, TAN); Bevava col to Bekoho summit, Nov. 1928 (bud), *Humbert* 6425bis (P); Enaniliha, Feb. 1966 (fr.), *Rabevazaha* RN 11521 (P); idem, Dec. 1959 (fl.), RN 10387 *Rakotoson* (K, P); between Saindro Col and Eminiminy, Feb. 1934 (fl., y.fr.), *Humbert* 13999 (K, P); N part of 'chaines anosyennes', Nov. 1971 (bud), *Guillaumet* s.n. (P, TAN); Andohahela, Col Tanatana, Dec. 1989 (fl.), *Dransfield et al.* JD6773 (K, P, TAN) and (fl.) JD6774 (K, TAN); Andohahela, March 1992 (fr.), *Beentje & Andriampaniry* 4594 (BH, K, MO, P, TAN); idem, Dec. 1992 (fr.), *Beentje & Andriampaniry* 4766 (TAN); idem, Itrotroky R, Feb. 1993 (fr.), *Malcomber* 2129 (K, P). Locality not found: Andrianony, Manjarivolo, Nov. 1970 (bud), *Guillaumet* 3511 (P, TAN).

## 88. DYP SIS CORIACEA

A very attractive small palm with thick shiny leaves. This species was known as 'leather-leaf' among collectors, and the Latin name is a straight translation of this. The entire leaf dries pale green, which is most distinctive.



**Dypsis coriacea.** An undergrowth palm with very leathery leaves, Sahavary (*Dransfield et al.* JD6459).