



**Dypsis
concinna**

Cours 4713 (Didy to Brickaville) has 3–9 branched rachillae, a longer rachis than normal, and more leaflets than normal. This is an extreme form of *D. concinna*; the few specimens with bifurcate proximal rachillae (*Rakotovao* RN 12115, *Cours* 4410) already have slightly longer rachis and slightly more leaflets than the strictly 1-order branched specimens. *Cours* 2312 (Andringitra massif, Ambodibaiso forest, Jan. 1945 in bud and fruit, P) looks like this taken to extremes: it is described as 7 m high and being used to make blowpipes; the leaf sheath is 17 cm, its inflorescence branches to 2 orders with a rachis of 5–20 cm and 3–5 branched + 6–10 unbranched first order branches. It certainly cannot be called *D. concinna* any more but does not match anything else either.

SPECIMENS SEEN. Ambatondrazaka: Ambatosoratra, Jan. 1962 (fr.), *Rakotovao* RN 12115 (P). Moramanga: Analamazaotra, anno 1912 (fl.), *Perrier* 11972 (P; type of *Neophloga tenuisepta*); idem, Feb. 1924 (fl.), *Perrier* 15983 (P); Andasibe, Feb. 1971 (fl.), *Cremers* 1419 (P); idem, April 1971 (ster.), *Moore & Mabberley* 9913 (P); idem, Nov. 1986 (bud), *Dransfield et al.* JD6411 (K, TAN) & JD6416 (K, TAN); idem, March 1988 (bud), *Dransfield et al.* JD6489 (K, TAN) & JD6488 (K, TAN) & JD6489 (K, P, TAN); idem, Dec. 1991 (fl.), *Beentje* 4535 (BH, K, MO, P, TAN); Anranumenabe, Nov. 1986 (fl.), *Dransfield et al.* JD6435 (K, TAN); Mantady, Dec. 1991 (bud), *Beentje & Andriampaniry* 4539 (K, TAN) & 4550 (K); idem, April 1992 (old fl., fr.), *Beentje & Andriampaniry* 4653 (BH, K, MO, P, TAN); idem, Dec. 1992 (fl.), *Beentje & Andriampaniry* 4550 (K, TAN); Rahobevava to Andasibe, March 1951 (fr.), *Cours* 4410 (P); Lakato, Dec. 1932 (fl.), *Leandri* 717 (P) and (fl.) 720 (P); idem, Sept. 1942 (fl.), *Decary* 18222 (K, P); Lakato road, June 1964 (ster.), *Bosser* 19739 (P); S of Moramanga, Feb. 1930 (bud), *Decary* 7082 (P) and (y.fr.) 7218 (P); idem, Nov. 1952 (old infl.), *Leandri* 1659 (P). Central Madagascar, anno 1885 (fr.), *Baron* 3413 (K, P, lectotype of *N. concinna*); idem, comm. Oct. 1882 (y.fr.), *Baron* s.n. (K). Without any locality, anno 1875? (y.fr.), *Pool* s.n. (K, syntype of *N. concinna*; identification not quite certain, a wretched specimen).

69. DYPISIS SCHATZII

This is a very handsome small undergrowth palm; it is named for the collector of the type, George Schatz of Missouri Botanical Garden, who has worked with us in the field, often helping greatly with logistic arrangements.

DISTRIBUTION. E Madagascar; only known from Betampona.

HABITAT. Lowland rain forest, steep mid slope; 500–565 m.

LOCAL NAMES. *Tsinkara* (Betsimisaraka).

USES. Stems used to make blowpipes.

CONSERVATION STATUS. Vulnerable. Only known from a single site; numbers estimated to be less than fifty.

Dypsis schatzii *Beentje* sp. nov.

D. integræ similis sed statura robustiore foliis majoribus inflorescentia ramosa triadibus confertim dispositis differt. Typus: Madagascar, Betampona, *Schatz et al.* 2687 (Holotypus K; isotypus MO).

Solitary or clustering palm. **STEM(S)** 2–3 m tall, to 1 cm diam.; internodes 2–6 cm long, distally with dense reddish scales, often with sheath remnants clothing the stem in its distal part. **LEAVES** 6–13 in the crown, entire or with 2 pinnae; sheath 8–12 cm long, dense reddish scaly, closed, with triangular auricles 0.6–1.2 cm long; petiole absent or up to 10 cm long, distally c. 2 mm wide, densely scaly; lamina dark green, when *entire* obovate, 17.5–41 cm long, 6.8–11 cm wide, with lobes 2.6–7 cm long; main veins 11–13, faint, only the midrib prominent; apices long-dentate, the teeth continuing along the outer margins to about halfway down the leaf, the teeth to 1 cm long, rarely a deep lacuna almost reaching the midrib; midrib densely scaly, minor veins with bands of scattered scales abaxially, as well as white-punctate abaxially which gives



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the abaxial side a silvery appearance; when *pinnate* with a rachis 18–22 cm long, leaflets 2 on each side of the rachis, the proximal 9–10 × 1.1–1.7 cm, acuminate, leaflet interval 2–3 cm, distal leaflets obovate 17–24 cm long, c. 7 cm wide, with 3–5 main veins, connate for > 80%. **INFLORESCENCE** interfoliar, branched to 1 order; peduncle 28–31 cm long, distally 1.5–2 mm diam., densely reddish-scaly; prophyll 18–21 cm long, 6–7 mm wide, borne at c. 4 cm above the base of the peduncle, opening in the distal 1.5–2 cm, with scattered scales; peduncular bract inserted 14–18 cm from the base of the peduncle, 9–11 cm long, opening in the distal few cm, with scattered scales; non-tubular peduncular bracts 2–3 mm long, sometimes almost tubular; rachis 1–5 cm long, beige in fruit, with 3–6 first order branches; rachillae 6.5–13 cm long, minutely puberulous with reddish stellate scales and dense triads; rachilla bract 0.6–0.8 mm, rounded. **STAMINATE FLOWERS** with sepals 1.1–1.4 × 0.6–1.6 mm, the middle one very asymmetrical; petals 1.6–2 × 1.2–1.4 mm; stamens 6, slightly biseriata (offset < 0.1 mm), filaments

0.4–0.6 mm long, thin, anthers 0.8–1.3 × 0.4–0.5 mm, dorsifixed and with parallel locules; pistillode 0.6–1 × 0.3 mm. **PISTILLATE FLOWERS** not seen. **FRUIT** pinkish red, 13–14 × 4–6 mm. **SEED** c. 8 × 2.5 mm, with homogeneous endosperm.

NOTE. Relationships are probably with *D. integra* but distinct in the more robust stature, in all parts being larger, in the branched inflorescence with the triads more densely arranged.

A plant from Ifanadiana: upper Sahany R., Nov. 1911 (bud), *Perrier* 11962 (P; type of *D. forficifolia* var. *reducta*) is very similar as for the leaves, but the inflorescence is much smaller, with a shorter peduncle but a longer rachis (10 cm) with twelve partially



Dypsis schatzii. **A** crown with infructescence × 1/2; **B** crown with bifurcate inflorescence × 1/2; **C** fruit in vertical section × 2. All from *Schatz* 2687. Drawn by Rosemary Wise.

reflexed rachilla 2.5–3.5 cm long. The sepals are c. 0.7 mm long, and the stamens seem to be didymous; the plant is in young bud, so we are unable to reach a conclusion as to its identity.

SPECIMENS SEEN. Toamasina: Betampona, Dec. 1925 (bud), *Perrier* 17467 (P); idem, April 1989 (fr.), *Schatz et al.* 2687 (Holotype K; isotype MO, not seen); idem, Oct. 1991 (bud), *Beentje* 4487 (K, TAN).

70. DYPsis CORNICULATA

This is a very beautiful small and neat undergrowth palm with slender stems and dark green, shiny leaves. Based originally on a single inflorescence, this species remained for long a misunderstood taxon. The specific name is Latin for 'curved in the shape of a horn', presumably a reference to the young fruit.

DISTRIBUTION. Mananara, Mandritsara, Sainte-Marie, Betampona.

HABITAT. Rain forest, flat to steep mid slopes or ridgetops; 70–850 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Vulnerable. Numbers are thought to be low (less than two hundred).

Dypsis corniculata (*Becc.*) *Beentje & J. Dransf.* **comb. nov.**

SYNONYM:

Neophloga corniculata Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 24 (1906); Becc., Palme del Madagascar 25, fig. 18, t. 23 (1912); Jum., Cat. Pl. Madagascar, Palmae: 20 (1938). Type: Madagascar, Ile Sainte Marie, Tafondru forest, March 1847, *Boivin*, lectotype P, indicated here.

Clustering palm in groups of 5, or solitary but in subcolonial groups. **STEMS** 1.5–6 m tall, occasionally with remnants of sheath bases; distal internodes 0.8–2 cm long, 5–20 mm diam., grey-brown, distally reddish pubescent; crownshaft pale green with dark brown scales. **LEAVES** 6–10 in the crown; sheath 6–15 cm, with patches of reddish scales or with scattered scales, with lacinate auricles to 15 mm; petiole absent or up to 7.5 cm long, 2–2.5 mm diam., with scattered scales; rachis 13–40 cm long, in mid-leaf c. 2 mm wide, with dense to scattered scales; leaflets 9–18 on each side of the rachis, in groups of 2–4 but sometimes the distal ones regular, the group interval 3–6 cm, the proximal 4–10 × 0.4–1.8 cm, median 6–14 × 1.2–2.6 cm, distal 5–10 × 1–2.5 cm, main veins 1–3, with marginal bands of scattered scales, sometimes with scattered scales on the major and minor veins, and distally along the margin with some larger scales, apices unequally acuminate to almost praemorse, bases often flat and connate with the rachis for c. 5 mm, distal pair joined for 1.5–4 cm, with bands of scattered scales, dentate at the apex. **INFLORESCENCE** interfoliar, branched to 1 or 2 order(s); peduncle 9–26 cm long, distally 2–5 mm diam., pubescent or with scattered to dense red-brown scales; prophyll 16–27 × 0.6 cm, borne at c. 6 cm above the base of the peduncle, with scattered scales, the apex open for 1–2 cm; peduncular bract inserted at 4–15 cm from the base of the peduncle, 4–11 cm long, with scattered scales, open over its whole length except for a 5 mm beak, deciduous and carried upwards by the lengthening **INFLORESCENCE**; non-tubular peduncular bract 1–20 mm, sometimes almost tubular; rachis 1–9 cm long, scaly, with 0–6 branched and 3–16 unbranched branches; rachillae (3–) 6–14 cm long, 1–1.5 mm diam., slightly zigzag, minutely puberulous with a few scales, with distant triads. **STAMINATE FLOWERS** with sepals 1–1.5 × 1–2.1 mm, the middle one very asymmetric, ciliolate; petals white, 2.2–2.5 × 1.2–1.4 mm, on a 0.4 mm high



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receptacle; stamens 6, uniseriate, the filaments 0.6–1 mm, thin, anthers 0.7–1.5 × 0.4–0.8 mm, versatile; pistillode 0.6–0.8 × 0.2–0.3 mm. **PISTILLATE FLOWERS** with sepals 0.9–1.7 × 1–2.4 mm, orbicular, slightly keeled, entire, the innermost largest; petals 2–3.5 × 2.3–3.5 mm, suborbicular, striate, imbricate with brief triangular valvate apices; staminodes 6, 0.2–0.6 mm; pistil 1.5–3.6 × 0.8–2.2 mm. **FRUIT** red, ellipsoid, 10–12 × 4–5.5 mm, with an obtuse point; endocarp fibrous, the fibres free or slightly anastomosing. **SEED** c. 7.5 × 4.5 mm, pointed at the base, rounded at the apex, with a median depression and homogeneous endosperm.



Dypsis corniculata. Close up of crown and inflorescence, Mananara Avaratra (*Beentje & Dransfield* 4820)