

14. *Astrocaryum scopatum* F. Kahn et B. Millán, sp. nov. (Fig. 40).

Palma caespitosa, calyce hirsuto; differt a *Astrocaryum huicungo* Burret floris pistillati calyce cupelliformi; a *Astrocaryum carnosum* Kahn et Millán annulo staminodiali altiore.

Kahn F. & Borchsenius F. 2563, Peru (Holotype: P; Isotypes: AAU, K, USM).

A *subcaulescent, multistemmed* palm. Stem in old trees up to 2 m high, 15 cm in diameter, unarmed with prominent leaf scars; sheaths of dead leaves persistent on about 1 m under the crown. Leaves 8-12, up to 6.5 m; sheath and petiole 1.3-2.2 m long, sheath dark brown-setose, abaxial side with flattened, slightly flexuous, black, grayish-tomentose, up to 15 cm long spines, these shorter and more or less arranged in groups on petiole; rachis 3.6-4.2 m long, covered with a grayish indumentum, black-setose, abaxial side with flattened, black, up to 6 cm long spines in groups, adaxial side with shorter spines in lower density; pinnae 81-96 per side, regularly arranged in one plane; basal pinnae 124 cm long, 4.2 cm wide; median pinnae 95-121 cm long, 6-7 cm wide; apical pinnae 37-47 cm long, 6-7 cm wide. Inflorescence and infructescence erect; prophyll 65 cm long, 11 cm wide, flattened, densely setose, with brown to black spines, up to 2 cm long; peduncular bract 90 cm long inserted 33-46 cm from rachis, densely brown-setose, with intermixed black spines, grayish-tomentose, 0.8 cm long, in higher density in the upper part; peduncle up to 1 m long, section oval, 4 x 3 cm at base, 3 x 2 cm near rachis, with a few small spines; rachis 33-36 cm long, armed with a few flexuous, black spines between pistillate flowers; rachillae many, proximal part 4-9 cm long, glabrous, distal part bearing staminate flowers 9-13 cm long, thick, hirsute with slender whitish hairs, one pistillate flower at base inserted on rachis. Staminate flower with sepals carinate, 1.4 ± 0.1 mm long; petals brown with margin yellowish, slightly connate basally, 3.8 ± 0.4 mm long; stamens 6; anthers 1.7 ± 0.1 mm long; filament up to 1.8 mm long; pistillode small, 3-parted. Pistillate flower subglobose; calyx cask-shaped, 3-denticulate, 10.0 ± 0.3 mm long, 11 mm wide, with many dense, brown, 1-2 mm long spines; corolla subequal, 3-denticulate, 9.8 ± 0.6 mm long, covered with brown to black, 3-5 mm long spines; staminodial ring entire, wavy, 4.5 mm long; pistil conoidal, floccose, with light brown, 2 mm long spines basally, these dark brown and in lower density in the upper part; stigmas 3, 4-5 mm long. Fruit turbinate, round in the upper part, 6.7-7.1 cm long including a 0.7 cm long rostrum, up to 4.5 cm wide; pericarp densely covered with bristly, soft, dark brown, 2-4 mm long setae; mesocarp thin; endocarp bony, 4.5 mm thick; perianth with corolla funnel-shaped, crenate to irregularly dentate, 19-20 mm long, the upper part covered with brown, 2-4 mm long setae, staminodial ring crenulate, 11-12 mm long, calyx irregularly 3-5-lobed, 12-13 mm long, hirsute with brown, 2-3 mm long setae in the upper part; putamen obovate, asymmetrical, 3.5 cm long, 2.5 cm wide.

Specimens observed:

PERU: Kahn & Borchsenius 2563 (AAU, K, P, USM), 22 May 1990, upper Marañon River valley, 10 mn from Santa María de Nieve, Amazonas, Bagua. Berlin 831 (BH), 4 Jan 1973, 240 m, Amazonas, Bagua, Cenepa River, between mouths of Huampani and Tuhusik streams. Distribution: In the northern parts of Peruvian Amazonia.

Ecology: On periodically flooded alluvial soils.

Uses: Liquid endocarp of unripe fruit is drunk.

Vernacular name: huicungo (P).

Notes: This species is characterized by the cask-shaped calyx, the lower density of the wide pistillate flowers on the rachis, and as a result, by having the widest fruits in this group. *Astrocaryum scopatum* differs from the two multistemmed *Astrocaryum carnosum* and *Astrocaryum huicungo* in the larger diameter of the distal part of rachillae including staminate flowers, in the whitish hairs between these flowers, and in the dry mesocarp.

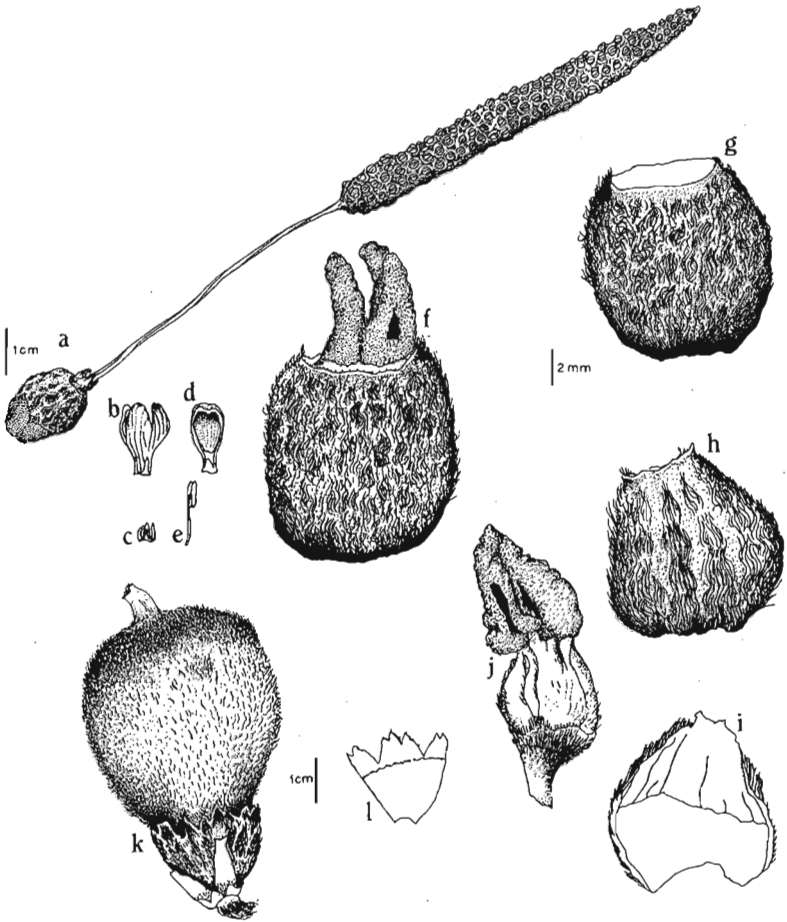


Fig. 40 - *Astrocarylum scopatum* - a. rachilla; b. staminate flower; c. calyx; d. petal; e. stamen; f. pistillate flower; g. calyx; h. corolla; i. staminodial ring in corolla; j. pistil; k. fruit; l. perianth in fruit: corolla with staminodial ring. (b-j with same scale. Material used: Kahn & Borchsenius 2563)

15. *Astrocarylum carnosum* F. Kahn et B. Millán, sp. nov. (Fig. 41).

Palma caespitosa, floris pistillati calyce tubulari hirsuto, mesocarpio carnosu; differt a *Astrocarylum huicungo* Burret annulo staminodiali dentato deminuto, epicarpium aculeis longioribus et irregulariter longis.

Kahn F. 1839, Peru (Holotype: P; Isotypes: K, USM).