

## ARTICLE 6. VARIOUS NEW PALMS.

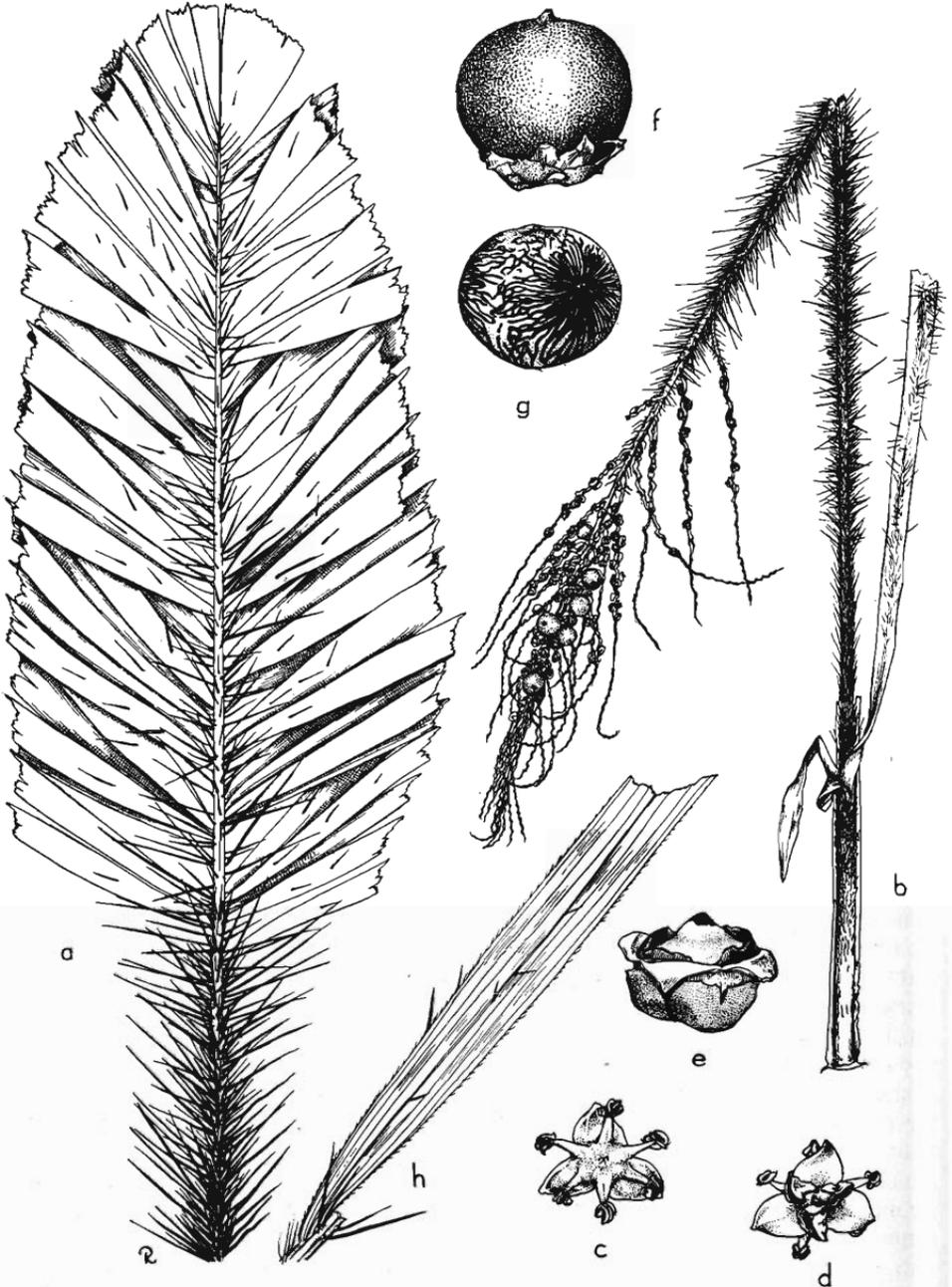
During the past two years several collections of palms, mostly from the new world, have been studied. In 1946, Mr. and Mrs. M. B. Foster collected many interesting numbers during a stay in Colombia. Their material of *Aiphanes* has proved of especial interest and three novelties are described here. The rewarding efforts of Mr. Paul Allen and Dr. R. E. Schultes provide further additions to the palm flora and one species is described from cultivation.

† *Aiphanes concinna*, spec. nov. Subgen. *Brachyanthera*. Fig. 91.

Coloniata; caules spinosi, ad 5 m. alti, 5-7.5 cm. lati: folia 75 cm. longa vel ultra, *concinna*, vaginis petiolis brevibus et rachibus dense spinis ad 9.5 cm. longis armatis; pinnæ utrinque 32-33 per greges 2-4 dispositæ, anguste cuneatæ, uninervatæ apicalibus 2-4-nervatis exceptis, 10-23 cm. longæ, 2-3.5 cm. latæ, subtus hispidæ venis setosis spinosisque et marginibus ciliatis: spadix simpliciter ramosus; spathæ duæ, exterior 37 cm. longa tomentosa et dense aculeata, interior longior, tenuis, tomentosa et modice spinosa spinis ad 2.5 cm. longis; pedunculus 85 cm. longus, tomentosus et dense spinis brunneis ad 5.5 cm. longis armatus; rachis ca. 35 cm. longa, tomentosa, sparse armata; rachillæ 40-50 vel plures, ad 23 cm. longæ; flores masculi 2.5 mm. alti et lati, sepalis deltoideis ad basin non incrassatis, petalis ovatis, antheris ovoideis; flores feminei jam fecundati, sepalis et petalis 6 mm. altis, cupula staminodiorum truncata, ovario glabro: fructus subglobosus 13-15 mm. diam., breviter rostratus; endocarpium globosum 11-13 mm. diam. læve haud foveatum foraminibus vix super medium insertis fibris applanatis tectis.

Colonial; stems to 5 m. high, 5-7.5 cm. wide, ringed with spines: leaves 75 cm. long or more; sheath and short petiole tawny-tomentose, densely armed with short aculeæ and ascending often pale-based spines to 9.5 cm. long; petiole ca. 5 cm. long; rachis ca. 66 cm. long, bifacial, moderately setose and spinose above, rounded, deciduous pale-furfuraceous, black-setose and densely spinose below with flat black spines 1.5-9.5 cm. long; pinnæ 32-33 on each side in groups of (1)-2-4 at intervals of 3-5 cm., probably borne in two planes, 1-nerved except the 2-4-nerved apical pair, the lower to 23 cm. long, 2 cm. wide, the median 17 x 3 cm. the upper ca. 10 x 2.5-3.5 cm. the terminal to 10.5 x 5.5 cm., hispid and setose above and below, the mid-vein yellow, prominent and sometimes armed above, pale deciduous-tomentose and sparsely spinose below, the secondary veins prominent below, margins setose: spadix ca. 1.2 m. long, simply branched; spathes 2, the outer 37 cm. long, ca. 2 cm. wide, ancipitous, tawny-tomentose, more or less densely armed on back with brown aculeæ 1-2 cm. long, the inner incomplete, that portion seen 60 cm. long, ca. 2 cm. wide, thin, tawny-tomentose and moderately spinose with spines to 2.5 cm. long; peduncle 85 cm. long, tawny-tomentose and densely spinose

with brown spines to 5.5 cm. long; rachis ca. 35 cm. long, tomentose, sparsely armed with crimped brown spines; rachillæ 40-50 or more, the lower to 23 cm. long, 3 mm. thick, sparsely spinose at base with glomerules of one pistillate and two staminate flowers for about half their length,



91. AIPHANES CONCINNA. a, leaf  $\times \frac{1}{6}$ ; b, spadix,  $\times \frac{1}{6}$ ; c, d, staminate flowers, face and back  $\times 3$ ; e, pistillate flower in young fruit  $\times 2$ ; f, fruit  $\times 1\frac{1}{2}$ ; g, endocarp,  $\times 1\frac{1}{2}$ ; h, pinna  $\times \frac{1}{3}$ .

staminate above, the upper to 8 cm. long and primarily staminate: staminate flowers (recovered from cobwebs on leaf) 2.5 mm. high x 2.5 mm. wide; sepals ca. 1.5 mm. long, more or less deltoid, acute, not produced nor thickened at base; petals 3 mm. long, 2 mm. wide, ovate; stamens 6, shorter than petals, filaments united in a broad ring at base, anthers ovoid, ca. 0.8 mm. long, pistillode a minute central protuberance: pistillate flowers all fertilized and in young fruit; sepals nearly reniform, ca. 6 mm. wide x 4 mm. high, irregularly crenate, hyaline-margined; petals ca. 6 x 6 mm., brown-margined, the perianth becoming cupular in fruit; staminodial cupule irregularly truncate; ovary glabrous: immature fruit blue-red, subglobose, 13-15 cm. long x 13-15 cm. wide, smooth when fresh drying roughened, abruptly short-rostrate; exocarp thin; mesocarp thin, pulpy with few flat fibers; endocarp globose, 11-13 mm. diameter, brown, grooved but scarcely pitted between the pores, the pores slightly above the middle with numerous appressed radiating flat dark fibers; seed not formed.

Colombia: Province Cundinamarca; in former dense forests near Fusagasaga, alt. 9000 feet, October 12, 1946, *M. B. & R. Foster 1870* (BH. type, A. isotype).

The small crowded pinnæ of this species are probably borne in two planes along the rachis and in their several characters are distinctive. Comparison of the leaf illustrated here from a flattened specimen with the crude illustration of *Martinezia disticha*, Linden, in *Gartenflora*, xxviii, t. 977 (1879) shows a certain resemblance. The latter, however, must be considered a nomen confusum for the illustration is so crude as to be unplaceable and no description is provided. In its scarcely pitted endocarp, *Aiphanes concinna* differs from most species for which fruit is known.

† **Aiphanes Fosteriorum**, spec. nov. Subgen. *Brachyanthera*. Fig. 92.

Coloniata; caules ad 10 m. alti, 10 cm. lati, horride armati: folium completum non visum; rachis inermis minute hirsuta; pinnæ alternæ, cuneatæ ad 45 cm. longæ apicibus 13-14 cm. latis eroso-lobulatis et 1-2 cm. productis, supra nitidæ, glabræ, subtus plus minusve dense hirsutæ et aculeatæ, ca. 23-venosæ: spadix simpliciter ramosus, robustus, ca. 3 m. longus; spathæ ignotæ; pedunculus tomentosus, setulosus et spinosus spinis tomentosis ad 6 cm. longis; rachis inermis; rachillæ ad 30 cm. longæ vel ultra, 3-6 mm. latæ, hispidulosæ; flores masculi ignoti: flores feminei in rachillam immersi, perianthio sub fructu accrescenti ca. 6 mm. alto, cupula staminodiorum irregulariter lobata, 2.5 mm. alta: fructus ruber, globosus, rostratus, 16-17 mm. diam.; endocarpium 14-15 mm. diam., globosum, foveatum, foraminibus vix super medium insertis fibris tenuibus tectis.

Colonial; stems to 10 m. high, 10 cm. thick with very long spines: leaves incompletely known; sheath fuscous-furfuraceous, densely brown-hispid and armed with stout, flattish, pale-based deciduous-tomentose spines 1-5.5 cm. long; petiole not seen; rachis unarmed, hispidulous becoming glabrous; pinnæ alternate on the leaf fragment seen, broadly cuneate, to 45 cm. long, 13-14 cm. broad at the erose-lobulate apex, longest along the midvein, the upper margin produced 1-2 cm., glossy and