

† *Bactris Augustinea*, nom. nov. Figs. 72, 73.

Augustinea ovata, Oersted, Kjoeb. Vidensk. Meddel. 1858, 38 (1859);

Sereno Watson in Proc. Amer. Acad. Arts & Sci. xxi, 466 (1886).

Bactris ovata, Wendl. in Kerchove, Les Palmiers, 234 (1878), not Stokes (1812).

Pyrenoglyphis ovata, Karsten, Fl. Columb. ii, 142 in obs. (1869).



FIG. 72. STIFF DENSE SPINY CLUMP of *Bactris Augustinea*.

Densely caespitose palm, making close small thickets (Fig. 72), strongly spinose; trunks to 10 feet high and 2 inches or more diameter, straightly erect, dark colored, clasped by the shredding leaf-sheaths; spines on trunk not numerous but abundant on petioles to the base and on rachis, some of them only $\frac{1}{2}$ inch or even less long but many of them 2-3 inches, compressed, very sharp, black-brown: leaves regularly and continuously pinnate, 3-5

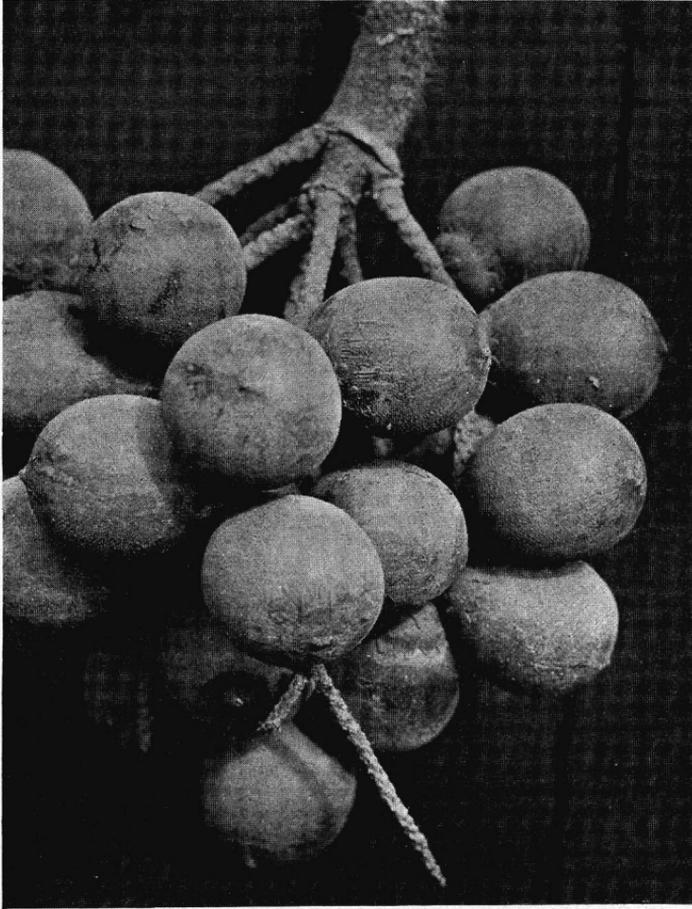


FIG. 73. FRUIT-CLUSTER of *Bactris Augustinea*. About three-fourths natural size.

feet long, petiole and rachis conspicuously rusty-pubescent or tomentose; pinnae regularly spaced and close together and sometimes 1 inch apart, 25 or more pairs, relatively short (12-18 inches), averaging about $\frac{3}{4}$ inch in width but some of them narrower, the larger number not exceeding 1 inch, glabrous above and puberulous underneath, grayish-green but lighter colored underneath, setose on margins, apex not elongated and usually with unequal points one of which may be an inch longer than the other, strong costæ 2-4 either side the rib and less distinct

ones intervening, all closely parallel: spathe about 10 inches long, pubescent and acicular, narrow, pointed, contracted into a long unarmed portion; spadix with 8-10 branches 5-8 inches long from near the apex of the densely brown-setose peduncle, pistillate flowers along the middle: fruit (Fig. 73) cream-white becoming dull purple with a soft fibrous flesh, globular-oblong to slightly obovoid, $1\frac{1}{4}$ - $1\frac{3}{8}$ inches long and $1-1\frac{1}{8}$ inches thick, surface lightly pubescent and scabrous, apex rounded and with a central short point, cupule about $\frac{1}{3}$ inch high with about 16 rather narrow but obtuse lobes in upper row; nut enveloped in a mealy rather than hair-like substance, 1 inch

or less long and $\frac{5}{8}$ inch broad, somewhat irregular, brownish, the three pores well down on the shoulders and with large depressions.

Near Summit, in low ground by the highway.

Type locality in Nicaragua. Photograph of type specimen in Copenhagen is very like my material. Distinction from *B. balanoidea* is in broader pinnæ more closely placed and in the different fruit (shown in Figs. 73, 74) and nuts. The differences in fruit are shown in Oersted's pictures in *L'Amérique Centrale*, t. 9, ff. 14-20, probably made from dried specimens; I have also examined Sereno Watson's material at the Gray Herbarium. Oersted contrasts this and *B. balanoidea* with *B. major*; but naturally the standing of all these species must await extended field study for it is doubtful whether the case can be determined satisfactorily from type specimens.

Bactris balanoidea, Wendl. in Kerchove, *Les Palmiers*, 233 (1878);
Sereno Watson in *Proc. Amer. Acad. Arts & Sci.* xxi, 466 (1886).

Fig. 74.

Augustinea balanoidea, Oersted, *Kjoeb. Vidensk. Meddel.* 1858, 39
(1859).

Pyrnoglyphis balanoidea, Karsten, *Fl. Columb.* ii, 142 in obs.
(1869).

Slender palm making a large thicket, 15 feet tall; trunks 1-2 inches diameter, mostly not rigidly erect although upright, but sometimes leaning or crossing each other, thickly beset with spines at least in association with the shredding vaginate leaf-sheaths, old trunks becoming more or less bare: leaves evenly pinnate, 3-5 feet long, wide-spreading and mostly downwardly curved, old spent ones hanging; petiole very slender, 18-24 inches long and less than $\frac{1}{2}$ inch thick, narrowly channelled underneath and convex above, closely rusty-pubescent, armored with many dark brown very sharp spines 1-3 inches long, continuing as a pubescent and well-armed rachis; pinnæ 30-40 pairs, subopposite or the lower ones alternate, spaced 1-2 inches apart and this giving the leaf an open look, narrow ($\frac{1}{2}$ - $\frac{5}{8}$ inch broad), 12-18 inches long, grayish-green and lighter colored underneath, glabrous or essentially so above and closely puberulent on under surface, margins setulose, apex unequally cut with one side lengthened into a slender point about 1 inch long, about 3 main costæ either side the midrib and finer veins between: spathe 12-15 inches long, thickly dark aculeate on a lighter colored surface, narrowed into a black densely setose portion; spadix with 10 or 12 simple short branches arising near top of peduncle, the latter becoming elongated and flattened and hanging in fruit, pistillate flowers borne about midway of the strands: fruit (Fig. 74) cream-colored (becoming purple?), oblong-balanoid (acorn-like), $1\frac{1}{2}$ inches long and 1 inch broad, sides parallel most of the way or sometimes widened toward the top, rounded at apex and beak short or negligible, surface scabrous, cupule about $\frac{1}{3}$ inch high with 12-14 short obtuse lobes in upper row; nut much enveloped in hair-like fiber, about $1\frac{1}{4}$ inches long and half as broad, somewhat irregular, black, with one pore on the shoulder near the