

In Maximiliana the anthers are 6, long and upstanding as if they were petals, the floral envelopes being minute at the base. In Scheelea the petals are 3, long upstanding and narrow as if they were anthers; the 6 stamens are small and short, in the center. These challenging structures are displayed in Fig. 206.

SCHEELEA, Karst. in Linnaea, xxviii, 264 (1856).

Heavy sometimes ponderous trees, monœcious or diœcious, bearing great upright pinnate leaves and large woody main interfoliar spathes containing branching spadix of flowers and fruits: sepals of staminate flowers minute, petals 3, elongate, narrow and stamen-like, stamens 6, much shorter than petals and soon collapsing in the bottom; sepals and petals of pistillate flowers large, ovary 3-loculed with basal erect ovule: fruit ovoid or cartridge-shaped, hard and durable, covered with a thin husk that is fibrous inside and a bony nut with 1-3 seeds or at least cells, calyx remaining as a deep imbricated cup; albumen homogeneous. About 40 arboreous species in South America as far south as Paraguay, in West Indies, Central America and Mexico. Genus dedicated to Scheele, German chemist who lived and worked in Sweden.

- A. Leaves erect; pinnæ divaricate, with extra rib near each margin: fruit obellipsoidal, mostly thickest above the middle and rounded to apex, rostrum with a flat disk-like base.....1. *S. Urbaniana*
- AA. Leaves arching and curved downward; pinnæ drooping from the rachis, lacking marginal ribs: fruit ellipsoidal, thickest at middle and tapered to apex, rostrum with a thick or bulbose base.....2. *S. curvifrons*

1. **Scheelea Urbaniana**, Burret, in Notizbl. Bot. Gart. Berlin, x, 672 (1929). Figs. 208, 210.

Tree 10-13 m. high: leaves erect, 4 m. long, pinnæ mostly divaricate, not drooping unless the loose lower ones, petiole dark-lepidote on one or two of the angled faces; pinnæ 4 cm. or less broad, finely striate lengthwise and usually with a rather strong nerve-depression on either side near the margin showing on one face or the other, conspicuously cross-veined, apex not very deeply bifid: spathe 2 m. plus long; pistillate flowers close together on curves near base of rachilla: fruit obellipsoidal, about 6 cm. long including beak and 3 cm. plus broad just above the middle where it is usually thickest, dusky in color and finely striate, rostrum narrow and 4-6 mm. long above its thin sharp-edged disk-like base, calyx-cup 2-2.5 cm. deep, the lobes only indifferently if at all tapered to a point, innermost lobes not much exceeding the outer lobes; nut 1-2-seeded.

Tobago: at Easterfield, *Broadway 4015* (type), *Bailey 141*, Mason Hall, *Broadway 4744*. At one time this palm was supposed to be *Scheelea insignis* of South America.

†2. **Scheelea curvifrons**, spec. nov. TRASH PALM. Figs. 206, 209, 210.

Alta arbor ad 12 vel 16 m., truncus unicus sed coloniatu: folia pinnata, 5 m. longa, glabra, rigida, albidiora subter; pinnæ glabræ, 1 m. vel plus

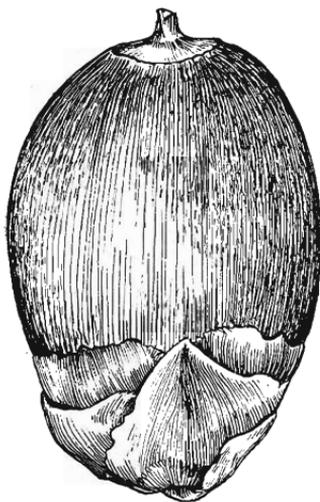
longæ, 3-5 cm. latæ, costa media prominens, nervi laterales obscuri, nervi transversi multi et conspicui: spatha maxima 2 m. vel plus longa, glabra, lignea, profunde sulcata, rostrum planum et 2-4 dm. longum; spadix simplex, multis undulatis glabrisque rachillis lateralibus 5-7 dm. longis, flores pistillati prope basin angulatam, flores staminati in superiore parte dimidia, omnes superficiales; staminati 3 erectis angustis et antheriformibus petalis et 6 staminibus brevibus basi, calyx valde parvus: fructus ellipsoidei, 6-6.5 cm. longi, 3-3.5 cm. lati, rostrum 5-7 mm. altum, calyx 3 cm. altus partibus imbricatis latisque; endocarpium tenue, postea divisum; nux valde dura et indurata, 1-3 loculis.

Heavy stout upright tree, 12-16 m. tall, bole covered with hang and shag, ringed, 3-5 dm. diam.: leaves 5 m. long, erect-arching, recurving at end and making an attractive coma; petiole glabrous and glossy, only indifferently if at all lepidote on any margin, 5-6 cm. thick at middle, bearing pinnæ singly at intervals of 5-6 cm., flattened or expanded on both faces as well as on sides; pinnæ firm, hanging, 1 m. and more long, 3-5 cm. broad, midrib prominent but other longitudinal veins weak or not noticeable, cross-veins conspicuous, lighter colored underneath, margins not lepidote: main spathe 2 m. plus long, ligneous and deeply grooved, glabrous, beak flat, 2-4 dm. long; spadix simple with many lateral glabrous rachillæ 5-7 dm. long, undulate on lower part, some of them bearing pistillate flowers on the zigzag angles, none of the flowers sunken; staminates in clusters, cream-color, each with 3 upstanding anther-like petals 15 mm. long, very small calyx, 6 inconspicuous short stamens about one-fourth



209. RECURVED LEAVES of *Scheelea curvifrons*. In center at bottom, clump of *Bactris planifolia*.

length of petals: fruit ellipsoid or cartridge-shaped, 6-6.5 cm. long when dry, 3-3.5 cm. broad, tawny or brown, finely striate lengthwise, beak tapered with expanded thick base and 5-7 mm. high altogether, calyx-cup about 3 cm. deep in three series comprised of enlarged subtending bracts, intermediary parts tapered to prominent point, and longer very broad



210. NUTS OF TWO SCHEELEAS, natural size. Left, *S. Urbaniana*; right, *S. curvifrons*.

interior lobes with stout short point; exocarp thin, persistent; endocarp thin, adherent, becoming somewhat shreddy; nut very hard, thick, the locules 1-3.

Trinidad, in St. Patrick, at Leasehold and Tllto, *Bailey 124, 183*, making dense forest-like stands, an attractive and conspicuous palm, trunks often covered with epiphytes; flowers in bloom exhale a strong turpentine odor.