

Carnauba wax. The leaves are 7 or 8 dm. in length and about as broad, split nearly to the middle into slender rays, on stout hemispherical petioles armed with strong straight or hooked spines. Flowers small, white, in large, branching panicles, the staminate above and the pistillate below. Drupe ellipsoidal, pointed at the base, about $1\frac{1}{2}$ cm. long and 1 cm. in diameter, smooth and olive colored at maturity.

This is considered with good reason one of the most valuable trees in Paraguay. Not only does it furnish strong, durable timber and wax, but its berries are eaten by the Indians, the tender vertex of the caudex makes an admirable cabbage, and its leaves are employed for various purposes, such as thatching, making fans, straw-braid, thread, fishing-lines, cordage, and the like.

In flower January; fruit April–May.

Copernicia alba, Morong, n. sp.

This palm is very similar in general appearance to *C. cerifera*, but is quite distinct in several characters. Stem low, frequently not over 3 m. high, and seldom reaching a height of 10 m., the diameter 15–18 cm., clothed nearly to the summit of the trunk with the bases of the old leaf stalks. The head is much larger than that of *C. cerifera*, containing many more leaves. In the inflorescence the two do not vary essentially, except that *C. alba* has a more densely woolly tomentum on the flowers and rachis. The flowers are smaller, and the floral bracts much longer and more acute. The fruit of this species is obtuse at the base, that of *C. cerifera* distinctly pointed, in other respects the same. In the wood of the two lies the principal difference, and this is very striking. The wood of *C. cerifera* has a very close, compact grain, making a solid log, when first cut slightly brown, afterwards becoming black, and hence called Palma negra; that of *C. alba* soft and spongy, very loose and cellular in grain, and absolutely unfit for timber, white in color and hence popularly known as Palma blanca. The roots of the two exhibit a structural difference as remarkable as that of the stems. The brown wrinkly cuticle of Palma negra encloses a thick, very dark colored, loosely cellular cortex, a separable heart wood of parenchymatous tissue and minute, black woody bundles pressed compactly together, entirely without open spaces or air-cells. In Palma blanca, the cuticle is whitish in color and smooth, the cortex thick, friable and yellowish in color, while the heart wood is composed of white parenchymatous tissue penetrated by many large open spaces or air-cells. Nothing shows the difference between the white and black palms more perfectly than this structural dissimilarity.

Common with no. 1073 on the banks of the Pilcomayo (1079). Flower January; fruit April–May.