

5. *Hyphaene tuleyana* Furtado *spec. nov.* **Figure 7.**

*H. thebaicae* arcte affinis sed fructibus fere tertia parte minoribus, ambitu laterali quadratis vel obovoideo quadratis, apice curvatis, ventre carinatis, carina etiam apicem versus valde dilatata haec species admodum diversa. Ab *H. occidentali*, quacum propter magnitudinem fructus facile confusa, fructibus conspicue carinatis in sectione transversa ovoideo-trullatis, ambitu laterali obovato quadratis et dorsali rotundato-quadratis haec species sat distincta.

*Caulis* basi solitarius, circa ad 3 m. altitudinem semel bifurcatus, ramis 7–9 m. longis. *Amenta* duo visa, parte fertili 18–20 cm. longa, 2 cm. in diam., parte basali sterilia, 4–5 cm. longa. *Fructus* circa 5 cm. altus, 6–6.25 cm. latus, 5 cm. in diam., in perimetro stigmatico pedicellari ambitu obovoideo-apice arcuatus, dorso curvatus, supra stigma carinatus, carina valde dilatata, basi inflexa, imo sulcata, utrinsecus paulo depressa, apice altiore quam dorsum vel eo aequa, ambitu dorsali quadrangulati-oblongus, in angulis rotundatus, basin versus paululo dilatatus vel non, medio vel supra cinctulus, apice recurvus; vertice in linea dorso-carinali sulcatus, sulco ante apicem carinae terminato; sectione transversa late ovoideo-trullatus, epidermide non friabili, luteo brunnescente vel cinnamomeo.

**AFRICA BOREO-OCCIDENTALIS:** Nigeria borealis (Tuley in 1964 — K, **holotypus**).

A very close ally of *H. thebaica*, from which this species is readily distinguished by its much smaller fruits which are obovate-quadrangular on the broadest side with arcuate apex, and almost quadrangular on the dorsal side, sometimes a little broader at the base and often constricted above the middle. The carina is dilated above and its tip is often the highest point in the fruit. The dent at the apex is more towards the carina than in the centre of the vertex which is the case in *H. thebaica*.

The fruit is more or less the size of that of *H. occidentalis* but differing from it in being obovate in the broadest side and having a well-developed carina making the species ovoid-trullate in cross-section.

A photograph taken by Tuley (apparently in 1964) shows that the palm does not divide underground but only when the stem is about 3 metres high. The tree was branched only once.

The specimen and the photographs were apparently made in 1964 and probably Russell (*Fl. W. Trop. Afr.* 3 (1) ed. 2: 169 (1968)), included also this species under *H. thebaica*.

Tomlinson identified the specimen of *H. togoensis* growing in the Achimota Gardens as *H. guineensis* and referred in the note at the herbarium to the wild North Nigerian species which may be *H. tuleyana*. This may also be partly the species from Bornu in North Nigeria which Drude had referred to as *H. thebaica* (*Engl. Jahrb.* 21: 110 (1896)).