Michaux M. 1966. Contribution à l'étude des Olacacées d'Afrique tropicale. Pages 262-264 (total 157-290) in Schnell R, Grout de Beaufort F, Bernhard F, Michaud M, eds. Mémoires de l'institut Fondamental d'Afrique Noire, Mélanges Botaniques, vol. 75. Dakar, Sengal: Musée de Institut Fondamental d'Afrique (IFAN).

## IX. – THE GENUS STROMBOSIOPSIS

Strombosiopsis ENGLER in E. et P., Nat. Pflanzenf., Nachtr. 1, p. 148 (1897). - LOUIS et LÉONARD, Fl. Congo b., I, p. 271 (1948).

Trees with bark exuding a red sticky resin. Leaves with 4-10 pairs of arched side secondary veins, ascending, anastomosed in arches, only in general visible on lower parts; small nerves arched, subparallel between them, especially visible on lower parts.

Flowers laid out in very short multifloral intra- or extra-axillary fascicles or racemes. Pedicels of 2-3 mm in length, inserted in a small alveolus bordered by 3-4 bracteoles. Flowers hermaphroditic, 4-merous. Corolla with 4 linear-oblong, fleshy and concave petals, apiculate. Androecium with 4 epipetalous stamens: anthers with broad connective more or less free of the petals and apiculate and with internal locules shorter than the external ones; very short filaments. Semi-inferior to inferior, 4-locular ovary, with 4-ovules -1 per locule - anatropous at the top of a erect central placenta.

Drupes obovoidal to ellipsoidal, in general smooth, completely locked up in the pedicel transformed into an accrescent conceptable, except at the top. Seeds solitary wrongfully drawn up, 1-integumented.

The genus *Strombosiopsis* ENGLER is distinguished easily from the other genera of Olacaceae by its resinous bark, the connective one of the anthers more or less fused to the petal and apiculate, the semi-inferior ovary and the fruit almost completely wrapped in the conceptacle and fused to it.

Until 1951, one attached to this genus 4 species:

- S. *tetrandra* ENGLER (in E. et P., 1. c.).
- S. zenkeri ENGLER (in Bot. Jahrb., XLIII, p. 168 (1909).
- S. congolensis DE WILD. et Th. DUR. (in Compt. Rend. Soc. Roy. Bot. Belg., XXXVIII, p. 187 (1899).
- S. buxifolia S. MOORE (in Journ. Bot., LVIII, p. 226 (1920).
- Or S. *congolensis* DE WILD. et Th. DUR. is the same plant as *S. tetrandra* ENGL. (see further).

In addition, the species *S. buxifolia* S. MOORE (HOLOTYPE: Mayumbe, Gossweiler No 6972) is to be excluded from the genus *Strombosiopsis* ENGL. (see: EXELL and MENDONÇA, Consp. Fl. Angol., 1, 2, p. 337 (1951). The plant is Ebenaceae, synonymous with *Maba kamerunensis* GILG; Exell and Mendonça established synonymy according to the study of the holotypes.

Finally the same authors in 1951 (1. c.) separated and excluded the species S. zenkeri ENGLER from the Strombosiopsis genus to create rightly a new genus: the genus Diogoa EXELL and MENDONÇA; from where new combination: Diogoa zenkeri (ENGL.) Ex. and MEND. which is distinguished clearly from S. tetrandra ENGL.

The genus Strombosiopsis ENGL. thus counts currently 1 only species: *S. tetrandra* ENGL., is a tree of the dense and wet forest, living from Nigeria to Angola.

## Strombosiopsis tetrandra ENGLER

*Strombosiopsis tetrandra* ENGLER in E. et P., Nat. Pflanzenf., Nachtr. 1, p. 148 (1897). -BERTIN, Bois du Camer., p. 192 (1920). - ENGL. in *Notizbl. bot. Gart.*, App. XXI, 1, p. 8 (1909). ENGL., Pflanzenw. Afr., III., 1, p. 83, Fig. 48 (1915). - EXELL et MENDONÇA, Consp. Fl. Angol., 1, 2, p. 337 (1957). - HUTCH. et DALZ., F. W. T. A., 1, 1, p. 648 (1954), 2<sup>e</sup> éd. -LOUIS et LÉONARD, Fl. Congo, 1, p. 271 (1948). - PELLEGRIN, Fl. Mayumbe, 1, p. 63 (1924). - SLEUMER in E. et P., Nat. Pflanzenf., 16 b, p. 19, Fig. 8 (1935). - DE WILD. in *Bull. Jard. Bot. Et. Brux.*, V, p. 214 (1916).

- S. congolensis DE WILD. et Th. DUR. in Compt. Rend. Soc. Roy. Bot. Belg., XXXVIII, p. 187 (1899).
- S. tetrandra var. congolensis DE WILD. et Th. DUR. in Ann. Mus. Congo b., Bot., Sér. V, 3, p. 71 (1909). Engl., Bot. Jahrb. XLIII, p. 168 (1909).

Shrub, small tree or generally large tree from 4 to 30 (35) m high and 15-70 (100) cm in diameter, often low branchy, sometimes with very high and straight trunk. Lobed trunk at the base, irregularly and deeply grooved; broad, dense, branchy crown and thick foliage. Rhytidome gray, smooth, tender, exfoliant itself in the manner of the plane trees [*Platanus*] (according to Testu No. 1729 (a)), brown black on section, thick of 0.1-0.6 cm. Bark of 0.7-1.8 cm thickness, red on fresh section, exuding a sticky, red, hardening with the air, more or less adherent resin from the cambium by a pink surface with large twisted fibres (according to Louis and Léonard, 1. c). Green young branches more or less angular or 2-winged (a wing on each side at the base of the petioles); internodes of 1.5-2 cm. in length.

Leaves alternate, distichouse, entire, glabrous and not stipulate. Petiole of 10-22 (28) mm in length, often thick (2-3 mm in diameter), canaliculate above, striated below, often swollen at the top. Blade elliptic, oblong-elliptic, oblong, oblong-lanceolate or even ovate, with an obtuse or round but often acute base, obtuse top or with apiculate short and blunt, mucronate, papyraceous, thick on recurved and entire margin, dark hardly shining above, on herbarium [specimens] brown clearly mat below, of 7.5-28 cm in length and 3.7-11.5 cm broad. Side concave tops, projecting veins median and secondaries lower part; (4)-6-7 (10) even of side secondary veins, arched, ascending, anastomosing in visible arcs lower part only in general. Small nerves arched, subparallel between them, distant of 2-4 mm between them, anastomosed, little distinct on the top, very slightly concave on the lower parts.

Flowers laid out in very short fascicles or racemes, multifloral (6-25 flowers each one), axillary or extra-axillary. Null or very short stalk; when it exists, it is very thick and reaches 2-5 mm in length; it is covered with tiny bracteoles grouped in 3-4 in a flange (collar) forming a small alveolus where is placed the floral pedicel. Pedicel of 2-3 mm in length, striated longitudinally. Floral buds ellipsoidal to cylindrical, of 3-4.5 mm in length and 1.5-2.5 mm broad. Flowers hermaphroditic, actinomorphic, 4-merous, white, white-cream or yellowish. Calyx cupuliform with 4 green, valvate sepals, largely deltoid, fleshy, with the subacute apexes with blunt, more or less ciliolate membranous margin, of 0.75-1 mm at the top, fused between them to at least half their length. Corolla with 4 valvate petals, linear-oblong, fleshy, concave, glabrous, apiculate at the top, fused in the bud and finally almost free between them except at the base, of 3-4.5 mm in length and 1-1.5 mm broad. Androecium with 4 epipetalous stamens:

anthers cylindrical lengthened more or less free of the petals, placed in the cavity of the petals, introrse and with internal locules shorter than the external ones, of 2.5-3 mm in length and 0,75-1 mm broad; broad connective finished above the anthers by a short 3-angled, 0.5-1 mm length, more or less visible point; short filaments, flattened, more or less free of the petals, 1/3 to 0.5 mm long. Ovary more or less ovoid, 0.5 mm at the top and 0.75 mm in diameter, capped with a 4-lobed disc, finished by a very short style, of 0.5 mm at the top, with a more or less 4-dentate or lobed stigma; ovary inferior, included in the pedicel, entirely 4-locular, with 4 ovules - 1 per loculus - anatropous, arched, of 0.5-0.75 mm in length at the top of an erect central placenta, with a dorsal external raphe.

Fruit with pedicel of 3-8 (11) mm in length, brownish, striated longitudinally, widened at the top; drupe solitary or geminate, axillary, obovoid to ellipsoid, 1.7-3.2 cm. in length and 1.2-2.4 cm in diameter, with a brownish external surface with black, smooth or more or less striated according to the meridian lines, completely locked up in the pedicel transformed into a conceptacle accrescent, except at the top where exists a circular depression of 4-8 mm diameter, bordered by the remainders of the calyx (4 small and short teeth) and at the bottom of which the base of the style persists. Conceptacle, epicarp and mesocarp brown dark, fairly hard, of more or less spongy aspect, 1-1.5 mm thick; endocarp very hard, brown clearly, strongly lignified, with a very granulous external surface, of 1-1.5 mm thickness. Seed solitary, obovoid, of 11-16 mm at the top and 8-12 mm in diameter, falsely built, to 1 only integument and more or less wrinkled surface. Endosperm brown-red, hard [corneus] and abundant; apical embryo, from approximately 1 mm in length.