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STERCULIACEAE

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STERCULIACEAE

S.M.H. JAFRI

Trees, shrubs or rarely herbs, usually with stellate hairs. Leaves alternate, sometimes subopposite, simple or palmately compound with caducous stipules. Inflorescence often in axillary panicles, orsometimes plants cauliflorus. Flowers hermaphrodite or unisexual, actinomorphic. Sepals 3-5, generally connate below with valvate lobes. Petals 5, often much reduced or lacking, contorted, imbricate, sometimes adnate to the base of staminal tube. Stamens in 2 whorls, those of the outer whorl sometimes reduced to staminodes or wanting, connate or sometimes free; anthers 2-locular, at least below. Ovary superior, of (2-) 4-5 (or 10-12) ± united carpels with axile placentation; ovules 2 or more in each loculus, rarely solitary, ascending or horizontal; styles connate, sometimes free, simple or divided apically into lobes. Fruit leathery, fleshy or papery (rarely woody), dehiscent or indehiscent, or occasionally dividing into mericarps; seeds albuminous, with curved or straight embryo.

About 60 genera and nearly 700 species, chiefly tropical or subtropical; represented by the following cultivated taxon in Libya, but a few indigenous small, shrubby members (such as *Melhania denhami* R. Br. and *M. ovata* (Cav.) Spreng are expected to occur in the Southern arid parts (see Ozenda, Fl. Sahara ed. 2:562. 1977). An economically important family including Cocoa (*Theobroma cacao* L.) and Cola (*Cola nitida* Vent.) Schott. et Endl. etc.

BRACHYCHITON*

Schott. & Endl., Meletem. 34. 1832.

Sterculia sect. *Brachychiton* (Schott. & Endl.) Benth. & Muell., Fl. Austral. 1:226. 1863.

Trees with entire or palmately lobed leaves. Inflorescence raceme or panicle. Flowers 1-2-sexual. Calyx 5-lobed, with usually spreading lobes. Petals absent. Stamens 10-15, carpels 5, syncarpous, free at maturity; ovary 5-locular; stigma peltate,

radiate or lobed. Fruit an etaerio of follicles, stalked, woody. Seeds numerous, biseriate, enclosed within thick, honey-comb-like endocarp.

Differs from *Sterculia* by its radicle next to hilum, seed and inside of carpels usually villous and calyx lobes spreading.

c. 11 species in Australia; represented by the following cultivated species in Libya.

***Brachychiton populneum** (Schott. & Endl.) R. Br. in Benn., Pl. Jav. Rar. 234. 1844; Keith, Prelim. Check List Lib. Fl. 295. 1965. (Fig. 1)

Poecilodermis populnea Schott. & Endl., Melet. 33. 1832; *B. diversifolium* auct. non R. Br.; Italian records (vide Keith, l.c.)

An evergreen, moderate size, tree, 6-12 (-20) m tall, glabrous. Leaves very variable, entire to 3-5-lobed, petiolate; lobes ovate, ovate-lanceolate to elliptic, 5-10 x 2-6 cm, acuminate, glabrous. Inflorescence a pendulous panicle. Flowers unisexual, whitish-creamy outside, reddish within, 1-1.5 (-2) cm across; pedicels 2-8 mm long, articulated. Calyx 1-2 cm long and across, lobed up to the middle, bell-shaped. Petals absent. Staminal column in male flowers c. 5 mm long, dilated towards base, glabrous. Staminodes usually present in female flowers at the base of ovary. Ovary slightly pubescent. Follicles on 2-3 cm long stalks, brown, elliptic, flattened acute, 4-6 x 1.5-2.5 cm glabrous. Seeds rounded 3-4 mm in diam., yellow, covered with long, stiff, stellate hairs.

Type: Described from Australia.

A-3 Tripoli, University Campus, small tree, flowers on pendulous branches, creamish outside, reddish within, 15.6.1980, *S.M.H. Jafri* 10841 (ULT); ibid., 18.6.1980, with last years fruits, *M.A. Siddiqi* 403 (ULT).

Distribution: A native of Australia, introduced elsewhere.

A good fodder tree, often planted in gardens as an ornamental evergreen tree; also used as shade tree along roadsides. The seeds are reported to be toxic.

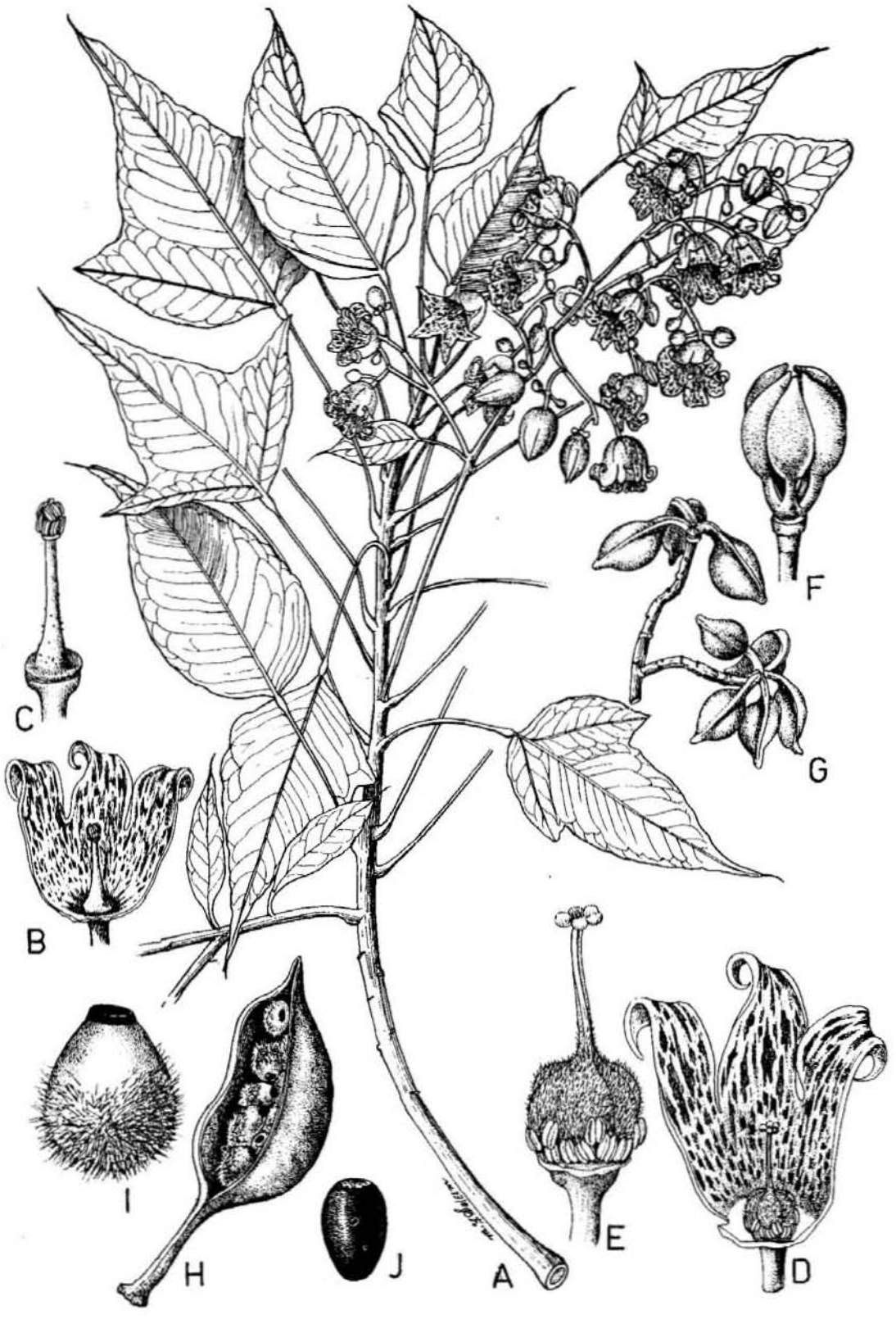


Fig. 1 **Brachychiton populneum**: A, flowering branch x ½; B, male flower x 2; C, staminal column x 4; D, female flower with staminodes x 2; E, the same showing gynoecium and staminodes only x 4; F, young fruits from a flower x 1; G, etaerios of follicles x ½; H, a dehisced follicle x ¾; I, seed with endocarp x 2; J, seed x 2.

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