



Fig. 1. *Cannabis sativa* L. Flowering twig with ♀ flowers,  $\times \frac{1}{2}$ , the same,  $\times 1\frac{1}{2}$ , fruit,  $\times 6$ .

## CANNABINACEAE (C. A. Backer, Heemstede)

### 1. CANNABIS

LINNÉ, Sp. Pl. (1753) 1027; Gen. Pl. ed. 5 (1754) no 988.

Erect tall annual, usually branched. *Leaves* simple, with 2 free stipules, in the lower part of the stem opposite, in the higher part spirally arranged, long-petioled, palmate, 3–11-foliolate. Flowers (♂)(♀) or mostly (♂♀). *Male flowers* in short, dense cymes, which are united into lax, foliate, terminal panicles, very shortly pedicelled. Tepals 5, free, oblong, membranous, imbricate. Stamens 5, epitepalous; filaments erect and short in bud, linear, with a narrowed apex; anthers comparatively large, basifixed, 2-celled, cells opening longitudinally, rudimentary ovary absent. *Female flowers* solitary in the axil of a small, primary, membranous, entire bract closely enveloping the ovary, each enveloped by a spathaceous, conspicuous, acuminate, secondary bract. Perianth absent. Ovary sessile, 1-celled; style central; stigmas 2, sessile, long, filiform, caducous. Ovule solitary, pendulous. *Achene* closely enveloped by the much enlarged, secondary bract, broadly oval, with a concave rimmed base, much compressed, faintly keeled on the lateral margins; pericarp smooth, hard, crustaceous, easily splitting into two halves; albumen unilateral, scanty, fleshy; embryo large, horseshoe-shaped; cotyledons large; radicle long.

Distr. Monotypic, native of Central Asia, cultivated in tropical Asia, naturalized in N. America.  
Uses. See under the species.

**1. Cannabis sativa** LINNÉ, Sp. Pl. (1753) 1027; HORSFIELD, Verh. Bat. Gen. 8 (1816) 97; BLUME, Bijdr. (1825) 515; ROXB. Fl. Ind. 3 (1832) 772; ZOLL. Syst. Verz. (1854) 107; MIQ. Fl. Ind. Bat. 1, 2 (1859) 275; Sum. (1860) 99, 171; DC. Prod. 16, 1 (1869) 30; HOOK. f. Fl. Br. Ind. 5 (1888) 487; BOORSMA, Teysm. 3 (1892) 796 *sub var. indica* (LAMK); ASCH. & GR. Syn. 4 (1911) 598; KOORD. Exk. Fl. 2 (1912) 123; MERR. Interpr. (1917) 199; HEYNE, Nutt. Pl. (1927) 580; WALTER in K.L. & S. Leb. Gesch. Bl. Pfl. Mitt.-Eur. 2, 1 (1935) 879; BURK. Dict. (1935) 437; BACK. Bekn. Fl. Jav. em. ed. 6 (1948) fam. 131, p. 1.—*C. indica* [RUMPH. Herb. Amb. 5 (1747) 208, t. 77, f. 1, *et C. i. tertia* l.c. f. 2] LAMK, Enc. 1 (1783) 695.—Fig. 1.

Stem slender, slightly angular, usually 1–1½ m tall, sometimes much taller, rather densely appressed-pubescent when young. Stipules erect, filiform or narrowly subulate, ± ½ cm long. *Leaves* (3–)5–7(–11)-foliolate; upper ones often 1-foliolate. Leaflets sessile, narrowly lanceolate from a narrowed base, long-acuminate, acute, rather coarsely acutely serrate, on the upper surface very scabrid by short stiff hairs inserted on top of a cystolith (very conspicuous in dried leaves), on the lower surface appressed-pubescent and rather densely beset with sessile glands, 6–14 cm by 3–15 mm. ♂: *Tepals* oblong, greenish white with pellucid white

margins, finely appressed-pubescent, ± 5 mm long. Anthers yellow, 3–4 mm. ♀: *Enveloping bract* on the back rather densely clothed with patent short, thick, glandular hairs, darkgreen, rather small during anthesis, afterwards much enlarged. Stigmas up to ½ cm long. Fruiting bract much contracted above the broad base, in the upper half with in-rolled margins, up to ¾ cm long. *Fruit* smooth, shining, yellowish or brown, ± 4–5 mm long. Seed containing oil.

Distr. Native of Central Asia, cultivated either as a fibreplant or as a narcotic in many other countries.

Use. In Malaysia sometimes cultivated on a small scale, exclusively for its leaves which are smoked as an intoxicant. The narcotic is the dried prepared tops of the female plant taken when the seeds are yet undeveloped. This drug is called *hashish*. Before the war it was forbidden to cultivate hemp in the Netherlands Indies, and the drug was, mostly with ripe fruit, often secretly smuggled into the country.

Vern. *Hennep*, D, *genja* (Sum.), *ginjé djawa*, J, *hemp plant*, E.

Note. Plant of very early cultivation, recorded for Java already more than 900 years ago by the Chinese. In Malaysia the ♂ plant is not cultivated, and the ♀ always possesses some ♂ flowers at the base of the ♀ inflorescences.