Zygophyllaceae

FAGONIA

Fagonia cretica Linn.

Habitat

North-west India and Deccan. Westwards to Afghanistan.

Classical & common names

Ayurvedic: Dhanvayaasa, Dhanvayaasaka, Dhanva, Duhsparshaa, Duraalabhaa.Yaasa has been equated with Alhagi pseudalhagi.

Unani: Dhamaasaa, Dhamaayaa.

Parts used

Whole plant.

Dose

Decoction 50-100 ml.

Classical use

Charaka prescribed Dhanvayaasa with Chandan (Santalum album), in prescriptions, in intrinsic haemorrhage; alcoholic preparation (Aasava) of the drug in dysentery; with honey as an antiemetic.

Sushruta gave the paste of the drug, processed with milk, for diarrhoea; the juice for treating the retention of urine.

The decoction of Dhanvayasaa mixed with clarified butter was prescribed for controlling vertigo (Vrindamaadhava, Chakradatta, Bangasena).

In folk medicine, the herb is credited with antibilious, antiseptic and blood-purifying properties. It is given internally in the form of a decoction in diseases due to vitiated blood; externally its paste is applied to abscesses, wounds, scrofulous glands; a decoction as a gargle in stomatitis and other diseases of the mouth. The drug is prescribed as a prophylactic against small pox and as a bitter astringent and febrifuge.

Duraalabhaadi Kashaaya (Sahasrayoga) is a classical compound, prescribed in the form of a decoction, as an antitoxic, cooling and anti-inflammatory drug.

Sahasrayoga has given separate compounds of Duraalabhaa and Dhanvayaasa. During the 16th century, in Ayurvedic texts Duraalabhaa is mentioned as a substitute for Dhanvayaasa. In practice, both the drugs are used as Dhamaasaa or Dhamaayaa.

Dhanvayaasaadi Kashaaya of Sahasrayoga is prescribed in bilious diarrhoea.

Dhamaayaa is an important ingredient in reputed Unani tonic Araq-e-Mussafi-e-Khoon Qawi (Qarabadeen-e-Jadeed), prescribed as a blood purifier in acne, pimples, boils, scabies, pruritus and other skin diseases.

Active principles and pharmacology

The plant gave diosgenin, kryptogenin, lanosterol, beta-sitosterol, harmine, fagogenin and oleanolic acid. Harman, chinovic acid obtained by hydrolysis of a glycoside, is considered to be chinovin. Betulin, campesterol, stigmasterol and triacontanol were also obtained from the plant.

Aerial parts of the plant exhibit antiviral, CVS-active, and spasmolytic activity. Active principles antagonise amphetamine hyperactivity.

A decoction of leaves and twigs qualifies for its use as a blood purifier. Stem, leaves and fruit show antimicrobial properties.

Rutaceae

FERONIA

Feronia elephantum Correa Feronia limonia (Linn.) Swingle



Figure 1 Feronia limonia—flowering branch [WOI]

Limonia acidissima L.

Habitat

Indigenous to South India, cultivated throughout the plains of India; up to 500 m in the western Himalayas.

Classical & common names

Ayurvedic: Kapittha, Dadhiphal, Dadhith, Surabhichhad.

Unani: Kaith. *Siddha:* Narivila.

English: Elephant Apple, Wood Apple.

Parts used

Bark, leaves, fruits.

Dose

Decoction 50-100 ml.

Classical use

Charaka and Sushruta included the leaves and fruits of Kapittha in prescriptions for diarrhoea, toxicosis, urinary disorders, ringworm and other chronic skin diseases.

Charaka prescribed the soup of Kapittha and Bilva (Aegle marmelos) in piles; the juice, mixed with Pippli (Piper longum) and honey, in hiccough.

Kapithaashtaka Churnam (Sahasrayoga, Shaarangadhara Samhitaa) is prescribed in diarrhoea, dysentery, internal abscesses, and piles.

Tender leaves of 5 trees—Feronia limonia, Mangifera indica (Aam), Syzygium cuminii (Jamun), Aegle marmelos (Bilva) and Citrus medica (Maatulunga)—are known as the Pancha Pallava group and are used as vaginal disinfectants due to their astringent, antimicrobial and anti-inflammatory properties.

In folk medicine, Kapittha is used as a substitute for Aegle marmelos in the treatment of diarrhoea and dysentery.

The fruit forms part of a paste applied to tone the breasts. The leaves are used for treating indigestion, flatulence, diarrhoea, dysentery and haemorrhoids.

Active principles and pharmacology

Analysis of the edible part (55–58%) of the fruit gave the following values: moisture 69.5, protein 7.3, ether ext. 0.6, fibre 5.2, carbohydrate 15.5, mineral matter 1.9, calcium 0.13, and phosphorus 0.11%; iron 0.6 mg/100 g, riboflavin 170 mg/100 g; and vitamin C 2.0 mg/100 g. The fruit is rich in mineral constituents, especially calcium and phosphorus. The acid content of the pulp varies from 7.6% in unripe fruits to 2.3% in fully ripe fruits. The fruit contains 3–5% pectin.

Leaves contain stigmasterol, orientin, vitaxin, bergapten and saponarin, and tannins. The major constituents of essential oil from leaves are methyl chavicol, t-anethol, thymol and p-cymen-7-ol. Others include alpha- and beta-pinene, sabinene, myrcene, beta-phellandrene, p-cymene, limo-