

Botanic name : *Jatropha gossypifolia* L. -- Species Plantarum 2 1753 (APNI)

Common name : Belly-ache Bush, Lal Bheranda (Bengali), Jarak

Family : Euphorbiaceae

Habitat : Terrestrial

Distribution : Tropical America, Tropical Africa; now widespread in tropical Asia including Indian sub-continent and Australia. Invasive in many countries including Queensland and Western Australia. several morphological, physiological and reproductive features including sympodial growth habit, a shallow root system, an abundance of extra-floral nectaries (provides more incentive for ant visitation), extreme adaptation to xeric (short stems) and non-xeric (temporary flooding) conditions coupled with high stem sugar reserves and sap content (physiological), prolific production of long-lived myrmecochorous seeds (ant-attractant substances) that have the ability to float in water, coupled with the ability to reproduce vegetatively and to prolifically flower and set seed all year, and absence of natural enemies, all combined together, contribute to its successful invasive strategy. More read: <https://www.cabi.org/isc/datasheet/28394>

Description : Perennial upright, deciduous shrub, can grow up to 1-4 m. sparsely branched, sticky, yellow, translucent sap; older stems are thick succulent, younger stems are purple and surface is pubescent; leaves light green, alternate, palmately divided into 3 - 5 lobes, measuring about 4.5 - 10 cm long and 5 - 13 cm wide, purple in young sticky hairy; flowers small, red in terminal corymbose cyme, maroon 5-petaled flowers in terminal panicles, peduncle of each cluster measuring about 10 - 15 cm long, separate male and female flowers in each cluster, male flowers have 8 - 12 yellow stamens while the middle flower of each branch of the cluster is female; tricarpeberry; fruits-oval capsule containing three dark brown seeds

Phytochemicals: Flavonoids, saponins, tannin, resin, triterpenes, gossypidien; gossypifan; jatrodien; jatrophatrione; jatrophenone; jatropholone A and B; jatrophone, 2,3-bis-(hydromethyl)-6,7-methylenedioxy-1-(3',4'-dimethoxyphenyl)-naphthalene; cyclogossine A & B; hydroxyisojatrophone; hydroxyjatrophone; isogadain, vitexin, apigenin, iso-vitexin, beta-sitosterol (bark), and a lignan jatrodien (stem)

Medicinal/Economic uses : Purgative (leaves and seeds), emmenagogue (bark), emetic (seeds), haemostatic, anti-inflammatory and antileukemic, antimicrobial, hepatoprotective, Traditionally used to treat intermittent fevers (leaves), carbuncles, eczema, itches, swollen mammae, sores on the tongues of babies, stomachache, and venereal disease, and bathing wounds (leaf decoction), fever in the form of a bath, while the juice is given to treat sores on the tongue of infants (leaf decoction), to stop bleeding nose, gums, or skin (Africa), to relieve abdominal colic pain due to constipation (Indonesia and Malayasia) The leaf extract has been used as an anticoagulant for biochemical and hematological analyses. Seed oil is used to treat constipation, leprosy and in paralytic affections.