

Botanic name : *Euphorbia hirta* L. -- Sp. Pl. 1: 454. 1753 [1 May 1753] (IK)

Common name : Asthma weed, Garden spurge, Bara dudhi (Hindi)

Family : Euphorbiaceae

Habitat : Terrestrial

Distribution : Native to tropical America, abundantly found in waste places along the roadsides.

Description : An annual prostrate hairy herb with watery latex, slender- stemmed, with many branches from the base to top, spreading upto 40 cm in height, reddish or purplish; leaves linear to ovate-lanceolate, simple, opposite-decussate, dark green above, pale beneath, blotched with purple in the middle, and toothed at the edge, exstipulate, shortly petiolate; flowers small, unisexual, arranged in axillary cymes at each leaf node, purplish to greenish in color, dense, axillary, short-stalked clusters or crowded cymes, about 1 mm in length, shortly pedunculate; fruit yellow, three- celled, hairy, keeled capsules, containing three brown, four-sided, angular, wrinkled seeds. The specific name, *hirta*, has reference to the peculiar hairy condition of the plant.

Phytochemicals: Alkaloids, flavanoids, Afzelin, myricitrin, Quercitrin-a flavanoid glycoside, rutin, quercitin, euphorbin-A , euphorbin-B, euphorbin-C, euphorbin-D, 2,4,6-tri-O-galloyl- β -D-glucose, 1,3,4,6-tetra-O-galloyl- β -D-glucose, kaempferol, gallic acid, and protocatechuic acid, β -amyrin, 24-methylenecycloartenol, β -sitosterol, heptacosane, nonacosane, shikmic acid, tinyatoxin, choline, camphol, and quercitol derivatives containing rhamnose and cholorphenolic acid triterpenoids, alkanes, choline, amino acids , shikimic acid

Medicinal/Economic uses : Antidiarrheal, diuretic, Hypotensive, galactogenic, antimalarial, hypoglycemic, sedative (on genitor-urinary tract), anticancer, anti-asthamatic (Indian medicine), antifungal, antiamoebic, antispasmodic, antibacterial, anxiolytic, analgesic, antipyretic, anti-inflammatory, tonic, nematicidal (against juveniles of *meloidogyne incognita*). The herb has a relaxation effect on respiration. Used in the treatment of gastrointestinal disorders (diarrhea, dysentery, intestinal parasitosis, etc.), toothache, rheumatism, colic and pains during pregnancy, skin diseases (decoction of dry leaves), syphilis, thrush (decoction of fresh leaves as gargle), conjunctivitis, bronchial and respiratory diseases (asthma, bronchitis, hay fever, etc.), and in conjunctivitis. Root decoction is helpful for low-lactating nursing mothers and for snake bites. The whole plant is decocted and used in the treatment of athlete's foot, dysentery, enteritis and skin conditions The herb extracts have surprising ability to maintain sexual health, Traditionally for respiratory ailments (cough, coryza, bronchitis, and asthma), female disorders, worm infestations in children, pimples, gonorrhoea, digestive problems, dysentery, jaundice, and tumors. Stem sap is used in the treatment of eyelid styes and a leaf poultice is used on swelling and boils. Extremely good as biopesticide. The whole plant extract inhibited growth of vascular wilt, the causal agent of sheath rot of rice, *Sarocladium oryzae*; inhibited aflatoxin production by *Aspergillus parasiticus* on agricultural crops, including rice, wheat, maize and groundnuts, inhibited soft rot infection by *Erwinia carotovora*, tobacco mosaic virus on *Nicotiana glutinosa* was strongly inhibited (>80%) by tannins, sugarcane mosaic virus-A by 78.5% (latex) and sugarcane mosaic virus-F. However, pregnant women should avoid use of the fresh herb. Effective in reducing the sperm mobility and density, regularly taking results in infertility. More read: <http://tropical.theferns.info/viewtropical.php?id=Euphorbia+hirta>