Botanic name: Fumaria parviflora Sm. -- Fl. Graec. Prodr. 2(1): 50. 1813 (IK)

Common name: Indian fumitory, Parpataka (Sanskrit)

Family: Papaveraceae/Fumariaceae

Habitat: Terrestrial

Distribution: Native to India; found worldwide and as paddy field weed in Indian

subcontinent

Description: An annual herb that reaches up to 5-30 cm with diffuse or suberect, and richly branched stems. Stems are glaucous, leafy, 5-30 cm long. Leaves are 1.5-4 cm, 2- to 3 times dissected in a pinnae, with very narrow-linear, ridged segments, minutely pubescent. Flowers are with white, occasionally flushed pink corolla, pedicellate; pubescent and arranged in 7- to 15(-20)- flowered racemes. Sepals minute, less than 1 mm long, 0.5 mm broad, sometimes obsolete or inconspicuous, laciniate-dentate, whitish, membranous. Upper petal with very short suborbicular, slightly oblong and obscurely downcurved spur; fruit subglobose, distinctly keeled, and acute nutlet that reaches up to 1.6-2.2 x 1.8-2.5 mm.

Phytochemicals: Fumaric acid and fumarine. Besides, bioactive compounds like $(5\alpha H,11\alpha H)$ -8-oxo-homoiridolide; n-docosanyl-2-O- β -D-glucopyranosyl salicylate; 2-methyl-6-hydroxymethylenedodecan-10-oyl-12, 15-olide14-O- β -D-xylopyranoside; 4-oxo-stigmast-5-en-3 β -ol-D-glucopyranoside; and salicylic acid-O- β -D-xylopyranoside along with the known compounds α -D-glucopyranosyl hexadecanoate and α -D-glucopyranosyl- $(2 \rightarrow 1')$ - α -D-glucopyranoside

Medicinal/Economic uses: Both fumaric acid and fumarine are antihistaminic, blood purifier, antipyretic, anti-tussive, immunomodulator, cholegogue and diaphoretic. An Ayurvedic bitter tonic used in the treatment of fever, allergic hives and constipation. Used in aches and pains, diarrhoea, fever (leaf decoction-chikungunya, intermittent fever, common cold), influenza and liver complaints. In South Kanara district of Karnataka, India, fine leaf paste mixed with butter milk are used to treat obstructive jaundice and bilious headache. The herb mixed with honey is taken internally to prevent vomiting. A cold infusion of the plant is used to treat wasting diseases of children and to help cooling during fever and in the treatment of constipation, syncope, vertigo, burning sensation of the body and dyspepsia. Used as a blood purifier for skin diseases and applied externally in leucoderma and as a fomentation for swollen joints. Hot infusion is helpful in constipation, IBS and haemorrhoids. The dried plant is also used as an anthelmintic, and diuretic and, in combination with black pepper, for jaundice.