

Botanic name : *Polygonum orientale* L. -- Sp. Pl. 1: 362. 1753 [1 May 1753] (IK)

Family: Polygonaceae

Common name: Prince's Feather, Garden gate, Oriental Pepper, Tall Persicaria

Habitat: Terrestrial

Distribution: East Asia-China to the Indian Himalayas; becomes invasive from SE Asia to Australia due to its high germination capacity, and allelopathic effects on neighbouring crops

Description: Annual erect, herb; leaves slightly hairy, ovate, alternate, stipulate; stipules ochreate; flowers white to pink, arranged in cylindrical raceme, laxly paniced, 8 to 13 centimeters long; perianth of each tiny flower consists of four or five segments, united near its green base and white or pink at the edges. There are six stamens, three fused carpels and three styles. Fruit-a dark brown oval, flattened nut, placentation basal.

Phytochemicals: Oxymethyl-anthraquinone, myricitrin, luteolin, gallic acid, catechin, protocatechuic acid and p-hydroxycinnamic acid, lignans-arctiin, lappaol B, orientalin, naringenin, ombuine-3-O-beta-D-galactopyranoside, ombuine-3-O-rutinoside, tryptophan, quercetin-3-O-methyl ether, kaempferol-3-O-(2"-O-alpha-L-rhamnopyranosyl)-beta-D-glucuronopyranoside, quercetin-3-O-(2"-O-alpha-L-rhamnopyranosyl)-beta-D-glucuronopyranoside, quercetin-3-O-beta-D-glucuronide, alphitonin, apocynin, kaempferol-glucoside, kaempferol-3-O- α -L-rhamnoside, quercetin-3-O- α -L-rhamnoside, kaempferol, anthraquinone glucoside, arborinol, β -sitosterol and β -sitosterol-D-glucoside

Medicinal/Economic uses: Antioxidant, tonic, vulnerary, anti-inflammatory, antinociceptive, antihyperglycemic, and antinociceptive. Used as Stimulant, diuretic, diaphoretic, emmenagogue, efficacious in amenorrhoea. A cold water infusion is useful in gravel, colds and coughs. In India, whole plant is used for whooping cough and menorrhagia. Fruit and leaves are burned and prescribed for fever. The flowers are used to thin the blood, remove obstructions, and ease pain while the leafy stem are useful in treating hernias. Decoction of leaves used for liver and splenic diseases whereas stem decoction is employed to treat hepatitis, tympanites, cancer, and ulcers. Seeds are useful to relieve flatulence, fever and thirst, and breathe. In India, root juice taken orally to increase frequency of urination. Young shoots are cooked and used as standard vegetable in Indo-China