

Botanic name: *Justicia gendarussa* Burm.f. -- Fl. Ind. (N. L. Burman) 10. 1768 [1 Mar-6 Apr 1768] (IK)

Common name: Gandarusa, Warer willow

Family: Acanthaceae

Habitat: Terrestrial

Distribution: Probably native of China, globally distributed in Paleotropics. E. Asia - Pakistan, India, Sri Lanka, Myanmar, Thailand, Cambodia, Laos, Vietnam, Malaysia, Indonesia, Philippines. Within India, it is found almost throughout and in Andaman Islands. Often cultivated or found as an escape in waste places and hedges.

Description: A perennial evergreen undershrub, 60-150 cm, with terete (neither striate nor angular) glabrous, dark purple twigs; leaves with up to 1 cm long petiole; lamina linear-lanceolate, glabrous on both sides, entire at margin, acute-acuminate at apex, attenuate basally; tapering into rounded apex and glabrous and shining with prominent purple veins beneath; stems quadrangular, thickened at and above the nodes and internodes; inflorescence terminal or axillary spikes bearing flowers; flowers irregular, bracts and bracteolate, bisexual, sessile, white with pink or purple spots inside and red in the throat and lip; Corolla 2-lipped, tube cylindrical, glabrous, upper lip 8 mm long, shallowly 2-lobed, lower one 1 cm long, 3-lobed, spreading. Staminal filaments approx. 5 mm long, anther lobes unequal. Ovary oblong-cylindric fruits capsule-club-shaped, about 12 mm long, and smooth.

Phytochemicals: Alkaloids, lignans, flavonoids, and terpenoids (iridoids, diterpenoids, and triterpenoids), essential oils, vitamins, fatty acids (docosanoic acid), and salicylic acid. The steroids campesterol, stigmasterol, sitosterol, and sitosterol-D-glucoside were isolated from the leaves and roots.

Medicinal/Economic uses: Antispasmodic, carminative, antiarthritic, antiperiodic, diaphoretic (leaves), anodyne, diaphoretic, diuretic and laxative (root), emetic (root bark). Used to treat chronic rheumatism (leaf decoction), head pains, facial paralysis and partial paralysis (leaf infusion), earache (leaf juice), bruises (plant decoction).