

**Botanic name :** *Parthenium hysterophorus* L. -- Sp. Pl. 2: 988. 1753 [1 May 1753] (IK)

**Common name :** Santa Maria Feverfew

**Family :** Asteraceae (Compositae)

**Habitat :** Terrestrial

**Distribution :** Native to South America. Pan tropical aggressively invasive with nearly 100% rate of seed germination and alien particularly, in India, Australia and parts of Africa invading more than 30 countries in different subcontinents and causing huge economic, social, and environmental loss. Considered as one of the 100 worst invasive plant species in the world (Lowe 2000)

**Description :** Erect, annual, much-branched with vigorous growth habit, herb; Shortly after germination the young plant forms a basal rosette of pale green, pubescent, strongly dissected, deeply lobed leaves; leaves and stems are covered with short, soft trichomes with taxonomic importance; flowers white, composite, flower heads are both terminal and axillary, pedunculate and slightly hairy, being composed of many florets arranged in rounded homogamous capitulum, with each head consists of five fertile ray florets (sometimes six, seven or eight) and about 40 male disc florets; stamens syngenesious; fruit cypsela; seeds (achenes) black, flattened, each with two thin, straw-coloured, spatulate appendages (sterile florets) at the apex, acting as air sacs and helps in dispersal.

**Phytochemicals:** Alkaloid, steroid, sterols, glycosides, tannin, terpenoids, phenolic compound (caffeic acid, p-coumaric acid, p-anisic acid, ferulic acid, fumaric acid, p-hydroxy benzoic acid, chlorogenic acid, neochlorogenic acid, protocatechuic acid, aerulic acid, and vanillic acid), saponin, flavonoid ( quercetagenin-3,7-dimethyl ether, apigenin, kaempferol-3-o-glucoside, quercetin-3-o-glucoside, kaempferol-3-o-glucoarabinoside, luteolin, santin, chrysoeriol, kaempferolglucoside, jaceidin) volatile oil ( $\alpha$ -pinene, camphene,  $\beta$ -pinene, sabinene, limonene, linalool, bicyclogermacrene,  $\alpha$ -humulene, trans- $\beta$ -farnesene,  $\beta$ -cubebene,  $\beta$ -elemene,  $\beta$ -phelandrene,  $\delta$ -cadinene,  $\beta$ -sesquiphelandrene, carota-5,8-diene,  $\alpha$ -cadinol, 3-octanol, p-cymene, phytol (1.0%), pentadecan-2-one, citronellol, bornyl acetate, tridecane,  $\beta$ -bourbonene  $\alpha$ -terpineol,  $\gamma$ -terpinene

**Medicinal/Economic uses:** Antitumor, antiamebic, and antibacterial. Herbal remedy for various intestinal and skin disorders using a decoction of boiled roots . Allelopathic substances reportedly are the source of insecticide, fungicide, nematicide, Plant parts are used in stock feed and a stimulator of silkworm growth. Causes contact dermatitis and bronchial spasm.