

Botanic name : *Bidens pilosa* L.

Common name : Spanish needles, Beggar's ticks, Broom stick,

Family : Asteraceae (Compositae)

Habitat : Terrestrial

Distribution : Native to temperate and tropical America; introduced in Indian (up to 2500m, msl) subcontinent, SE Asia, Africa; becomes invasive in introduced areas like Latin America and eastern Africa having the worst infestations of the weed

Description : Erect, annual, almost glabrous to densely hairy woody herb with angular branches and characteristic dark green colour; leaves are opposite and are divided pinnately into 3-5 leaflets with toothed margins, leaflets ovate to lanceolate; marginally winged petiole; flowers white and yellow and 5-15mm in diameter, borne on long slender peduncles, each flower head has 4 or 5 short, broad, white petals (ray florets) with numerous, yellow disc florets. The outer involucral bracts have finely hairy margins and are shorter than the inner bracts; anthers syngenesious. Fruit cypsela, slightly curved, stiff, heavily barbed awns at the distal ends.

Phytochemicals: polyacetylenes, polyacetylene glycosides, phytosterols, triterpenes and caffeic acid, flavonoids (aurones, chalcones, p-coumaric acid/derivatives, sesquiterpenes, friedelin and friedelan-3 β -ol), iodine.

Medicinal/Economic uses : Shoots and leaves, dried or fresh, are utilized in sauces and teas. Leaves and young shoots - raw or cooked- a resinous flavor-added to salads or steamed and added to soups and stews. Young shoot tips are used to make a tea. In NE India, young shoots and leaves are cooked or eaten raw with fish. In the 1970s, the United Nations Food and Agriculture Organization (FAO) promoted the cultivation of the plant in Africa because it is easy to grow, edible, palatable, and safe. All parts of the plants are frequently prepared as a dry powder, decoction, maceration or tincture. useful in the treatment of inflammation, snake bites (pulverized plants), wounds (crushed herbs), digestive and immunological disorders, infectious diseases, cancers, stomach upset (leaf decoction), colics (whole plant), catarrh (decoction of whole plant), diarrhea and dysentery (plant decoction), asthma (decoction), rheumatism (juice and decoction of roots/whole plant), acute appendicitis, enteritis (decoction), conjunctivitis, otitis, gastritis (decoction), yellow fever (fresh leaves), colds & viral fever (fresh/decoction), hepatitis, malaria (juice), eye infection (leaves/whole plant fresh juice), diabetes (decoction of whole plant), microbial infection (decoction for external bathing), pulmonary tuberculosis (decoction of the whole plant), menstrual irregularities (decoction), hemorrhoids, and nose bleeding. Plant parts in various pharmacological preparations are antiinflammatory, antihyperglycaemic, immunomodulator, anti-ulcer and hypotensive activity, carminative, styptic and vermifuge, and also effective against goiter (The Philippines). The root is washed and dried, and used as a painting brush. Also is a source of natural dye.