Botanic name: ***Mikania micrantha*** **Kunth** -- Nov. Gen. Sp. [H.B.K.] 4(15): 105 (ed. fol.). 1818 [1820 publ. 26 Oct 1818]; later publ. 4(15): 134 (ed. qto.). 1820. [22 May 1820]

Common name: Bitter vine, Mile-a-Minute, American Rope

Family: Asteraceae (Compositae)

Habitat: Terrestrial

Distribution: known for its vigorous and rampant growth (Its shoots have been reported to grow up to 27mm a day. Vegetative reproduction is also efficient and vigorous), this dangerous invasive climber grows best where fertility, organic matter, soil moisture and humidity are all high and can produce 40,000seeds per year which are easily dispersible. It restricts growth (alleolopathic effects), damages or kills other plants by cutting out the light and smothering them. A native of Central and South America, this climber was introduced to India by British after the World War II to camouflage airfields and is now a major weed. It is also one of the most widespread and problematic weeds in the Pacific region. Its seeds are dispersed by wind and also on clothing or hair. Thus, the weed has been listed as one of the world's 100 worst invasive alien species by Invasive Species Specialist Group of IUCN (Lowe et al. 2001). More read: http://www.iucngisd.org/gisd/species.php?sc=42

Description: An extremely fast-growing, perennial creeping climber (vine), branched, slender, twine-stemmed; stems ribbed lengthwise (i.e. longitudinally) and are either hairless (i.e. glabrous) or slightly hairy (i.e. puberulent).leaves simple, glabrous, opposite, pairs along the stems and are heart-shaped or triangular, thin, broadly ovate, shallowly or coarsely toothed, triangular or ovate, acute at apex, broad at base; flowers, each 3-5mm long, are arranged in dense terminal or axillary corymbs with numerous florets arranged in a capitulum; individual florets are white to greenish-white, surrounded by a row of four small green bracts (i.e. involucre). These bracts (2-4 mm long) are oblong to egg-shaped in outline (i.e. obovate) with pointed tips (i.e. acute apices); fruit typical cypsela; seeds black, linear-oblong, five-angled and about 2mm long with terminal pappus of white bristles that facilitates dispersal

Phytochemicals: Sterols, diterpenes, polyphenols, flavonoids, and sesquiterpene lactones, and mikanolide and dihydromikanolide (antimicrobial compounds), three new sesquiterpene lactones, named deoxymikanolide, scandenolide, and dihydroscandenolide, and m - methoxy benzoic acid, essential oils (pinenes, camphene, ocimene, linalool, thymol, geraniol etc)

Medicinal/ Economic use: Antimicrobial, Hypoglycemic, anticancer, hemostatic, anti-malarial (boiled with other plants to produce a herbal tonic), antidote, anti-menorrhagic, febrifuge, cholagogue, diuretic and febrifuge (leaves). A tea made from the whole plant is used to treat stomach aches and to clean out the uterus (dilation and curettage). Leaves boiled in sea water can be used to relief skin itch while macerated plants can be applied to fresh wounds, insect bites, snake bites, syphilis, and skin irritations. Different traditional preparations of plant part/s are used to treat children's clyster, erisipela, gastro-intestinal disorder and eczema, colds, headaches and stomach aches. An infusion is used for washing the skin as a treatment for rashes, skin eruptions, smallpox, chicken pox and measles.