



Puncturevine or Jamaican feverplant

Taxonomy

Order: Zygophyllales

Family: Zygophyllaceae

Species: *Tribulus cistoides* Linnaeus

Summary

Native to East Africa and Madagascar but because of its tolerance to salt and drought conditions, it has been used extensively for groundcover in coastal landscapes in many tropical regions. Its common name, puncture vine, comes from the spiny fruits that are sharp enough to puncture tires and are very painful to step on. The plant, however, also has medicinal uses, treating ailments such as headache, nervous disorders, and constipation. Invasive in sandy and disturbed areas.



Tribulus cistoides © Forest and Kim Starr

Biology

Thrives in maritime habitats and dry tropical environments as it is salt and drought tolerant. The well-developed taproot supports trailing stems that may form thick mats up to 5 m wide. It flowers year-round, reproduces from seed and the seeds are long-lived (5 years). The spiny fruits may be dispersed by animals and may also facilitate germination on compacted soils.

Distribution in Caribbean

It is naturalized in Florida (USA) and parts of the Caribbean including Anguilla and the Turks and Caicos Islands.

Pathway of Entry

Natural dispersal: Spiny fruits are well equipped for efficient dispersal: they may become lodged in tires and footwear and attach to animal fur.

Intentional dispersal: via plant trade; used extensively for groundcover in coastal landscapes.

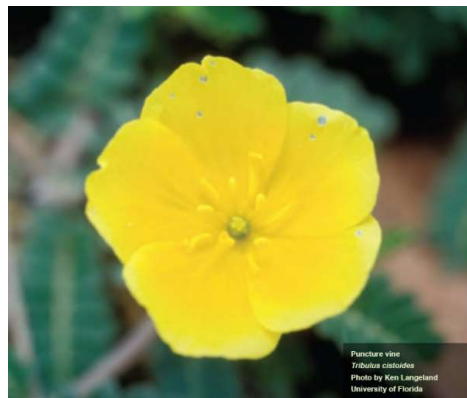
Impact

Puncture vine invades dunes, coastal lands, sandy sites, median strips, and disturbed sites. It is considered a Category II invasive by the Exotic Pest Plant Council of Florida, and the potential harm to humans and animals by the spiny fruits is of great concern.





Tribulus cistoides flower and foliage © David Eickhoff



Tribulus cistoides flower © Ken Langeland, University of Florida



Tribulus cistoides mature spiny fruit © Ken Langeland



Tribulus cistoides young spiny fruit © Forest and Kim Starr, Starr Environmental, Bugwood.org

Field Description

A trailing perennial (sometimes annual) herb, with many-branched stems about 1 m long or longer; tap root woody; stems often slightly woody at the base, tips erect, younger stems covered with silky hairs.

Leaves are opposite, up to 10 cm long, even-pinnate, 5-8 pairs of leaflets; leaflets elliptic or oblong, to 2.8 cm long and 1.2 cm wide, covered with silky hairs; margins entire, bases rounded, tips bluntly pointed; terminal leaflet pair spine tipped; stipules linear, to 0.7 cm long.

Flowers showy, solitary in leaf axils, on long, hairy stalks to 3 cm long; sepals 5, lance shaped; petals 5, bright yellow, rounded, to 2.5 cm long.

Fruit consists of a hard-spiny capsule, burr-like, to 1.5 cm across, splitting into 4 or 5 segments, each of which has two sharp spines up to 8 mm long and contains one or more seeds.

Similar Species

It is very similar to the widespread, introduced weed, *Tribulus terrestris*, which is an annual, and may be distinguished from *T. cistoides* by the much smaller petals, up to 1 cm long, and the shorter flower stalks, also up to 1 cm.

Further Information:

<http://plants.ifas.ufl.edu/plant-directory/tribulus-cistoides/>

[http://plants.ifas.ufl.edu/wp-content/uploads/files/caip/SP257/Tribulus_cistoids\(SP257-128\).pdf](http://plants.ifas.ufl.edu/wp-content/uploads/files/caip/SP257/Tribulus_cistoids(SP257-128).pdf)