

PEST ALERT

WEST VIRGINIA DEPARTMENT OF AGRICULTURE

Gus R. Douglass, Commissioner

Tropical Soda Apple

Solanum viarum Dunal



Flowers, stems, and thorns of tropical soda apple (C.T. Bryson)



Immature fruits, leaves, and thorns of tropical soda apple (J.J. Mullahey)



Full grown tropical soda apple (J.J. Mullahey)



Close-up view of leaves and thorns of tropical soda apple (G.K. Douce)

Tropical soda apple, *Solanum viarum* Dunal (Solanaceae; nightshade family), is native to South America (Argentina) and has become a major weed of pastures in Florida and Georgia. Although this plant is currently a problem in Southeastern states, its seed is transported to new areas in the digestive tracts of cattle and horses.

Description

Tropical soda apple is a bushy, prickly herbaceous (non-woody) perennial. It is usually about 3 ft. tall, but can reach 6 ft. under good growing conditions. Its flowers are white with five recurved (curving back toward the stem) petals, a cream-colored center, and they are grouped in small clusters at the ends of stems. Rigid, yellowish, straight prickles (up to $\frac{3}{4}$ inch in length) occur along the stems, veins on both surfaces of leaves, and leaf stalks. Its leaves are alternate along the stem, simple (one blade), lobed, 8 inches long by 6 inches wide, and covered with fine soft hairs. The immature fruits look like miniature striped watermelons, while the mature fruits are dull medium-yellow, leathery-skinned, and up to $1\frac{1}{2}$ inches across.

Life History

Tropical soda apple reaches maturity from seed within 105 days. It is difficult to eradicate due to rapid regeneration of shoots from an extensive root system. Flowering and fruiting time have not been established in northern climates, but it is likely to flower from June to September. One plant can produce 40,000 to 50,000 seeds with a germination rate greater than 75%. Seeds are dispersed by birds, cattle, deer, and horses through digestion.

Ecology/Habitat

Tropical soda apple is found primarily in pastures, ditch banks, roadsides, cattle yards, and wet areas of various fields. It cannot survive standing water for extended periods of time. In Florida, it is occasionally found in monoculture (single species) stands covering 50 acres or more. It has recently been reported as a weed of nature preserves where it displaces native plants by crowding and shading.

Similar Plants

Tropical soda apple is similar to our native horse-nettle (*Solanum carolinense* L.). However, tropical soda apple is a larger plant with longer thorns and is more shrubby than horse-nettle. Horse-nettle flowers can be lavender or white in color as opposed to the strictly white flowers of tropical soda apple. tropical soda apple flowers are generally similar to those of tobacco, potato, tomato, and eggplant.

For more information or to report suspected infestations, contact:

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