

***SOLANUM TAMPICENSE* (SOLANACEAE) IN TEXAS**

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ABSTRACT

Solanum tampicense, an invasive weed currently known in the United States only from Florida, is native to southern Mexico, Belize, Guatemala, El Salvador and the West Indies. It is here reported as new to Texas. The species has been confirmed to occur in Resaca De La Palma State Park in Cameron County in the eastern Rio Grande Valley. This wetland species is considered to have great potential to alter wetland sites and spread northward through the Gulf Prairies and Marshes of eastern Texas.

Solanum tampicense Dunal (commonly called wetland nightshade or soda apple) is considered native to southern Mexico, Guatemala, El Salvador, Belize, and the West Indies (Fox & Bryson 1998). The species was first collected in the United States from Garden Key, Dry Tortugas, Florida. The name has been included in the checklist of the flora of the Dry Tortugas National Park since 1974 (Reimus and Robertson 1995). Currently the species is known from southwest and west-central peninsula Florida and the eastern portion of the panhandle of that state (Kartesz 2017). It is listed as a noxious weed in various states, such as Texas (Texas Invasives 2017), but this listing is more toward concern and prevention than confirmation of the presence of the species in the state. The species is considered to have great potential as a noxious weed and to have the ability to alter wetlands.

Based on the following specimen collected in the Lower Rio Grande Valley of south Texas, we report *Solanum tampicense* as new to the flora of Texas. Cameron Co.: Resaca De La Palma State Park, along Ebony Trail, 0.15 mi S of park headquarters, along edge of resaca, 5 Dec 2016, *Singhurst, Jones, Kallejo, and Wagner 21,050* (BAYLU). Figure 1.

The *Solanum tampicense* population in Cameron County (Figures 1-3) consisted of one well established and several lesser developed plants in the understory of native thorn scrub thicket. Associated flora included *Celtis laevigata*, *C. pallida*, *Chiococca alba*, *Chromolaena odorata*, *Condalia hookeri*, *Cyperus odoratus*, *Ebenopsis ebano*, *Echinodorus berteroi*, *Ehretia anacua*, *Mikania scandens*, *Mimosa peltita*, *Parkinsonia aculeata*, *Passiflora filipes*, *Petiveria alliacea*, *Pluchea* sp., *Polygonum*

hydropiperoides, *Rivina humilis*, *Sabal mexicana*, *Setaria* sp., *Spermoacoce glabra*, *Stachys drummondii*, *Triadica sebiferum*, and *Xylosma flexuosa*.

Plants of *Solanum tampicense* are sprawling shrubs with stems woody at base and herbaceous-prickly above. Stems may attain a length of 5 m and 1.5 cm in diameter. The flowers are white and range from 3 to 11 in number. The fruits are spherical berries to 1 cm in diameter, shiny solid green when immature but burnt orange then bright red at maturity. *Solanum tampicense* spreads by seeds and rhizomes. Fox and Bryson (1998) mentioned that dispersal is by water, but the soft, red fruits suggest to us that dispersal may also be by birds, mammals, and possibly locally by fish.



Figure 1. *Solanum tampicense*, Cameron Co., Texas, 9 December 2016. Photo by Jason Singhurst.



Figure 2. Fruits of *Solanum tampicense*, Cameron Co., Texas, 9 December 2016. Photo by Jason Singhurst.



Figure 3. Resaca [habitat] of *Solanum tampicense*. Photo by Jason Singhurst.

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