Lee, K.L., J.R Singhurst, and W.C Holmes. 2016. *Podranea ricasoliana* (Bignoniaceae) adventive in Texas. Phytoneuron 2016-40: 1–3. Published 31 May 2016. ISSN 2153 733X

PODRANEA RICASOLIANA (BIGNONIACEAE) ADVENTIVE IN TEXAS

VAN L. LEE Department of Biology Baylor University Waco, Texas 76798-7388

JASON R. SINGHURST Wildlife Diversity Program Texas Parks and Wildlife Department 4200 Smith School Road Austin, Texas 78744

> WALTER C. HOLMES Department of Biology Baylor University Waco, Texas 76798-7388

ABSTRACT

Podranea ricasoliana is reported here as adventive to Texas, based upon a recent collection in Cameron County. The species is generally considered to be native to South Africa. The occurrence of the species in Texas probably originated from discarded garden waste of ornamental specimens, since the seeds of the species exhibit low fertility.

Podranea ricasoliana Sprague (Bignoniaceae) is commonly known as pink trumpet creeper, Port St. John's creeper, and Zimbabwe creeper. It is generally thought to be native to South Africa (Bailey 1949; Wunderlin 1998). However, many South African botanists, such as Malan and Notten (2002), suspect that this climber may not be indigenous to South Africa, apparently based upon historical perspective. All [African] sites where *Podranea ricasoliana* are found have ancient connections with slave traders, who frequented the eastern coast of Africa long before the 1600s, thus alluding to an earlier introduction. It has become such a widely grown garden plant in all of the warmer parts of the world that it may prove difficult to find its real origin. The species has also been recorded in India, the Philippines, New Caledonia, Bolivia, Mexico, Nicaragua, Panama, Columbia, Belize, Ecuador, and Jamaica (Hassler 2016) and Australia (Atlas of Living Australia 2016). Within territories of the USA, *P. ricasoliana* is known from Puerto Rico and the Virgin Islands (Acevedo-Rodriguez 2005). In the USA, it has been reported from Brevard, Dade, Everglades, Orange, Polk, Highlands, Seminole, and Volusia counties, Florida (Kartesz 2016; Wunderlin 2016). It is also cultivated and supposedly naturalized in Hawaii (Starr et al. 2004). Overall, *P. ricasoliana* thrives in warm climates but can survive in cooler conditions as well.

In Texas, the species is occasionally used as an ornamental, particularly in the Gulf Prairies and Marshes vegetation region (personal observations).

Cultivated specimens. Texas. <u>McLennan Co.</u>: Las Adaes [residence of the collector] on Big Mailbox Road, Robinson (Waco), Nov 2007, *W.C.Holmes 13924* (BAYLU). <u>Nueces Co.</u>: 600 Block of Park Avenue, Corpus Christi, 11 Oct 1974, *J.A.Bauml et al.* 74-331 (TEX). [Both specimens are annotated as being cultivated. The Nueces County specimen information is from the Plant Resources Center, University of Texas Herbarium (2016)].

Continued field studies within Texas have resulted in the collection of a specimen of *Podranea ricasoliana* apparently naturalized in Cameron County. The species may now be reported as adventive to the state.

Voucher specimen. Texas. <u>Cameron Co.</u>: Valley Land Trust Preserve, 0.2 mi N of Texas Rte. 227 and Salida de Luna, W side of Texas Rte. 227, resaca (dried river channel), N 25° 57′ 16″, W 97° 25′ 49″, 8 Dec 2015, *Singhurst 21029* with Allen, Pons, and Rodriguez (BAYLU). Figure 1.



Figure 1. Podranea ricasoliana naturalized in Cameron County. Photo by Jason Singhurst.

Podranea ricasoliana is a vigorous woody evergreen climber or climbing shrub lacking tendrils. Its compound leaves are long-oval shaped and often are deep glossy-green. It has strong stems that may grow to 10 meters high. Flowers, which are borne in panicles, are pink, about 5 cm long, and trumpet-shaped. The tubes have 7–9 rose-red veins inside. Fruits (observed on *Holmes 10279*, BAYLU) from Ajijic, Mpio. Chapala, Jalisco, Mexico) are light brown, narrow, straight, flattened capsules up to 25 cm long. Seeds (not present on *Holmes 10279*) are brown, ovate, and flat and have large rectangular papery wings (arils). [Parts of the above description are from Malan and Notten (2002) and Bailey (1949).

Apparently seeds have low fertility, but the species can be propagated by cuttings or layering (Malan & Notten 2002). With its fast growth, appealing appearance, and durability during cooler seasons, *Podranea ricasoliana* is a good ornamental plant. Due to its worldwide usage in gardens, the species has been able to spread, apparently sprouting from pruning and discarded garden waste. Its rapid spread in optimal conditions causes many to consider it to be an invasive weed despite the fact that many of its seeds are infertile. Currently, this species is considered to be a weed in Australia, New Zealand, and Hawaii (Hassler 2016; Starr et al. 2016). *Podranea ricasoliana* probably has escaped to the wild in Texas from specimens brought in for horticultural reasons.

Podranea ricasoliana was documented in a Texas Ebony Resaca Forest (NatureServe 2016). These forests occur on deep, well-drained soils of the Rio [Río] Grande River delta along mesic resaca banks and low-lying areas formed by old river channels. These areas are not a component of the active river floodplain but may be subject to periodic inundation and drying. This evergreen subtropical plant community once occurred as dense forests with and larger subtropical trees. The remaining examples of the Resaca Forest in Texas are described as having no clear dominant. Larger tree species occurring at the Valley Land Trust Resaca Site were Ebenopsis ebano (Pithecellobium ebano), Ehretia anacua, and Leucaena pulverulenta. Other characteristic trees and shrubs included deciduous trees more characteristic of floodplain forests, such as Celtis laevigata var. laevigata, Fraxinus berlandieriana, Prosopis glandulosa var. glandulosa and Sabal mexicana. Characteristic tree and shrub species with subtropical affinities were Celtis pallida, Malpighia glabra, Parkinsonia aculeata, Phaulothamnus spinescens, Sideroxylon celastrinum (Bumelia celastrina), and Zanthoxylum fagara. Common shrubs were Baccharis neglecta, Condalia hookeri, and Malvaviscus arboreus var. drummondii. The ground layer and other vines were sparse because of shading but included Cissus trifoliata, Eupatorium odoratum, Nekemias arborea, Panicum maximum, Rivina humilis, and Salvia coccinea. The invasive Schinus terebinthifolius (Brazilian peppertree) was present along the waterline [edge] of this resaca site.

Etymology. The name *Podranea* is an anagram of *Pandorea* (Bignoniaceae), a closely related Australian genus in which *Podranea* was first described as *Pandorea ricasoliana* Baill. *Pandorea*, hence *Podranea*, is from the Greek *Pandora*. The specific epithet, *ricasoliana*, presumably alludes to the gardens of Baron Ricasoli in Italy (Bailey 1949).

LITERATURE CITED

- Acevedo-Rodriguez, P. 2005. Vines and Climbing Plants of Puerto Rico and the Virgin Islands. Department of Botany, National Museum of Natural History, Washington, D.C.
- Atlas of Living Australia. 2016. http://bie.ala.org.au/search?q=Podranea+ricasoliana Accessed 1 Feb 2016.
- Bailey, L.H. 1949. Manual of Cultivated Plants. Macmillan Company, New York.
- Hassler, M. 2016. World Plants: Synonymic Checklists of the Vascular Plants of the World (version Nov 2015). Digital resource at <www.catalogueoflife.org/col
- Kartesz, J.T. 2016. Taxonomic Data Center. The Biota of North America Program (BONAP). Chapel Hill, North Carolina. http://www.bonap.net/tdc
- Malan, C. and A. Notten. 2002. Kirstenbosch National Botanical Garden <a href="http://ntbg.org/plants/plantdetails.php?plantd
- NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. http://explorer.natureserve.org Accessed 18 Apr 2016.
- Starr, F., K. Starr, and L. Loope. 2004. New plant records from the Hawaiian Archipelago. In: N.L. Evenhuis and L.G. Eldredge (eds.). Records of the Hawaii Biological Survey for 2003. Part 2: Notes. Bishop Museum Occasional Papers. 79: 20–30.
- Wunderlin, R.P., B.F. Hansen, A.R. Franck, and F.B. Essig. 2016. Atlas of Florida Plants (http://florida.plantatlas.usf.edu/). [S.M. Landry and K.N. Campbell (application development), USF Water Institute.] Institute for Systematic Botany, Univ. of South Florida, Tampa.