



# *Ottoschulzia rhodoxylon* (Palo de rosa)

**Scientific Name:** *Ottoschulzia rhodoxylon*

**Common name:** Palo de rosa

**Family:** Icacinaceae



Palo de rosa, photo by Omar Monsegur, USFWS



Fruits of Palo de rosa, photo by Omar Monsegur, USFWS



Palo de rosa, photo by Jesús Ríos-Cruz, USFWS

**Description:** Palo de rosa is a small evergreen tree that grows up to 15 m in height. The common name palo de rosa refers to the pink color of the wood. The leaves are alternate, simple, with ovate, rounded or elliptic shape, a leathery texture, and a dark glossy green color. The flowers, mostly solitary, are small with five sepals joined at the base, corolla with a short cup-shape tube and five lobules. The fruit is a drupe (fleshy fruit containing a seed enclosed in a hard shell) that turns dark purple when ripe. Flower and fruit production is associated to individuals with stem diameters greater than 5 inches, and its flowering is associated to seasonal rains.

**Distribution:** The distribution of palo de rosa includes Puerto Rico and the Hispaniola (Dominican Republic and Haiti). The populations of palo de rosa in Puerto Rico occur within the subtropical dry forest and subtropical moist forest life zone, over limestone and serpentine soils. Palo de rosa was probably more common and widespread throughout the limestone and serpentine forests of Puerto Rico. In fact, some historical specimens extended its habitat to sand dunes. It is currently known from the Guánica, Susúa, Guajataca, Cambalache, and Río Abajo Commonwealth Forests, and from several areas managed for conservation along the northern coast (i.e., Hacienda Esperanza and Fort Buchanan).

**Habitat:** The habitat of palo de rosa is quite variable, most likely depending on the microhabitat conditions. On dry limestone forest like the Guánica Commonwealth Forest, the species grows on the bottom of drainages that provide moisture, whereas at the Susúa Commonwealth Forest, palo de rosa occurs along the borders of rivers. The subpopulations along the northern karst of Puerto Rico are found on the top of limestone hills, possibly because those areas have no agricultural value, and so were not impacted by deforestation.

**Threats:** The species was listed because the populations known at the time of listing were vulnerable to urban development, forest management practices, and because of the sporadic flower and fruit production with lack of evidence of natural recruitment. At present, about 22 out of the 66 (30%) of the known subpopulations (localities) of palo de rosa occur on protected lands (public and private). The species remains vulnerable to urban development, landslides, hurricanes and habitat intrusion by exotic plants. In addition, despite the records of recruitment events, the species still shows a low recruitment rate and is limited to few localities.

**Conservation measures:** Palo de rosa was included in the federal list of endangered species in 1990 as endangered. The Endangered Species Act (ESA) defines an endangered species as a species which is in danger of extinction throughout all or significant portion of its range. Such action requires that federal agencies consult with the U.S. Fish and Wildlife Service (Service) before carrying out any activity that may threaten the existence of this species or result in the modification or destruction of essential habitat.

The Service is collaborating with partners to conduct habitat assessments in order to identify unknown populations and potential areas for future reintroduction efforts. In addition, the Service is working with partners to propagate the species and develop sound reintroduction projects in areas where the threats have been reduced. Moreover, in 2015, the Service signed a Memorandum of Understanding with the U.S. Army, Fort Buchanan, and Puerto Rico Department of Natural and Environmental Resources for the protection and management of palo de rosa at this U.S Army facility.

**References:**

- Breckon, G.J. and D.A. Kolterman. 1993. *Ottoschulzia rhodoxylon* Urban (Icacaceae) Final Report under Cooperative Agreement No. 14-16-0004-92-970 between U.S. Department of the Interior Fish and Wildlife Service and Department of Biology, University of Puerto Rico, Mayaguez Campus. Mayaguez, PR. 30pp.
- Ewel, J.J. and J.L. Whitmore. 1973. The ecological life zones of Puerto Rico and the U.S. Virgin Islands. Forest Serv. Research Pap. ITF-8, USDA. 72 pp.
- De Stefano R.D. and E. Santiago-Valentin. 2013. Typification of the species of *Ottoschulzia* (Icacaceae). *Harvard Papers in Botany*, Vol. 18, No. 1, pp. 67–70.
- Santiago-Valetin E. and E. Viruet-Oquendo. 2013. Notes on the Flower, Fruit, and the Reproductive Phenology of the Elusive *Ottoschulzia rhodoxylon*. *Harvard Papers in Botany*, Vol.18, No. 1, pp. 61–65.
- U.S. Fish and Wildlife Service. 1990. Final Rule. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ottoschulzia rhodoxylon* (palo de rosa). 558 FR 13488-13491.
- U.S. Fish and Wildlife Service. 1994. Palo de rosa (*Ottoschulzia rhodoxylon*) Recovery Plan. U.S. Fish and Wildlife Service, Atlanta, Georgia. 27 pp.
- U.S. Fish and Wildlife Service (USFWS). 2017. Palo de rosa (*Ottoschulzia rhodoxylon*) five-year review: summary and evaluation: Addendum to 2012 five-year review. US Fish & Wildlife Service Southeast Region Caribbean Ecological Services Field Office, Boquerón, Puerto Rico.

**Additional information:**

Please contact the U.S. Fish and Wildlife Service,  
Caribbean Ecological Services Field Office  
Address: P.O. Box 491, Boquerón, PR 00622  
Phone: 787/851 7297  
Fax: 787/851 7440  
Website: <http://www.fws.gov/caribbean/es>

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