

GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Paederia foetida



System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Rubiales	Rubiaceae

skunk vine (English), stinkvine (English), Chinese fever vine (English) Common name

Synonym Paederia scandans, (Lour.) Merr.

> Paederia chinensis, Hance Paederia tomentosa, Blume

Similar species Paederia cruddasiana

Paederia foetida is an aggressive, competitive vine. It can grow high into the **Summary**

canopy of trees in a variety of habitats. The vines climb over shrubs and trees, weighing them down and impeding regeneration. Paederia foetida also invades pastureland and is troublesome along roads and on power lines. Chemicals are often used as an effective method of controlling Paederia foetida. The seeds of Paederia foetida may be dispersed by birds and are also spread by the transport of rooted fragments. Paederia foetida has also been

cultivated as an ornamental.



view this species on IUCN Red List

Species Description

Leaf stalks of P. foetida are commonly up to 6cm long. Leaves and stems have a disagreeable odour, especially when crushed. The flowers are small, grevish pink or lilac in colour and occur in broad or long, \"leafy,\" curving clusters. Petals are joined to form a corolla with 5 spreading lobes. Fruits persist through winter and are shiny brown, and nearly round, and are typically 0.7cm wide. Inside are two seeds that are black, round and often dotted with white, needle-shaped crystals (Langeland et al. UNDATED).

Lifecycle Stages

P. foetida is a fast growing vine, that shows a wide ranging adaptability to different light, soil, and salt conditions. It is able to establish and grow above the frost line. It is also sensitive to fire. P. foetida flowers and fruits mostly in summer and fall (Langeland and Burks, 2000).

Habitat Description

P. foetida may grow high into the trees in a variety of habitats, from mesic hammocks to xeric sand hill communities, although it appears to prefer sunny floodplains and bottomlands. P. foetida can even grow under water (IFAS, 2001). It has been observed that P. foetida occurs frequently in tree gaps, and other disturbed areas (Langeland and Burks, 2000).

Reproduction

The seeds of P. foetida may be dispersed by birds, and are also spread by accidental transport of rooted fragments (Langeland and Burks, 2000). Starr et al. (2003) states that, \"P. foetida is dispersed throughout the world by humans who grow and cultivate the plant for ornamental or other purposes.\"



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General Impacts

Starr et al. (2003) state that, \"P. foetida thrives in a variety of habitats and exhibit aggressive growth. Vines climb on desirable shrubs and trees, weighing them down and impeding regeneration below the dense shade. \"P. foetida invades pasture land and causes problems along highways and on power lines. In the United States P. foetida has been observed to be the cause of smothering out portions of one of the few remaining populations of the endemic, federally endangered Cooley's water willow Justicia cooleyi (Langeland and Burks, 2000).

Management Info

<u>Preventative measures</u>: A <u>Risk Assessment of Paederia foetida</u> for Hawai'i and other Pacific islands was prepared by Dr. Curtis Daehler (UH Botany) with funding from the Kaulunani Urban Forestry Program and US Forest Service. The alien plant screening system is derived from Pheloung *et al.* (1999) with minor modifications for use in Pacific islands (Daehler *et al.* 2004). The result is a score of 21 and a recommendation of: \"Likely to cause significant ecological or economic harm in Hawai'i and on other Pacific Islands as determined by a high WRA score, which is based on published sources describing species biology and behaviour in Hawai'i and/or other parts of the world.\"

Control of the plant by chemical or mechanical means has to take into consideration damages to vegetation supporting the vine.

<u>Chemical</u>: Triclopyr and glyphosate products have been used for controlling *P. foetida* (Starr *et al.* 2003)). Langeland *et al.* (UNDATED) point out that complete control cannot be achieved with a single application and follow-up applications are necessary.

<u>Physical</u>: They also add that hand removal of *P. foetida* in landscape situations will be necessary but large-scale hand removal in natural areas has proven ineffective. Flooding decreases vigor but *P. foetida* remain alive when submersed for at least 192 days.

Principal source: <u>Paederia foetida</u> (Langeland and Burks, 2000) <u>Paederia foetida</u> (Starr et al. 2003)

Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

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18 references found for Paederia foetida

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Daehler, C.C; Denslow, J.S; Ansari, S and Huang-Chi, K., 2004. A Risk-Assessment System for Screening Out Invasive Pest Plants from Hawaii and Other Pacific Islands. Conservation Biology Volume 18 Issue 2 Page 360.

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Available from: http://www.hear.org/starr/hiplants/reports/html/paederia_foetida.htm [Accessed 28 October 2003]

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Diamond, Pete., 1999. *Paederia foetida* (Rubiaceae), new to the flora of North Carolina. Sida Contributions to Botany. 18(4). 1273-1276. <u>IFAS (Institute of Food and Agricultural Sciences). 2001. Skunk vine (Paederia foetida). University of Florida, IFAS, Center for Aquatic and Invasive Plants.</u>

Summary: Information on history and identification of species.

Available from: http://aquat1.ifas.ufl.edu/paefoe.html [Accessed 28 October 2003]

ITIS (Integrated Taxonomic Information System), 2005. Online Database Paederia foetida

Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from:

http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Paederia+foetida&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]

Langeland, K.A. and Burks, K. C (Eds) 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas, University of Florida. Paederia foetida

Summary: Information on plants that pose threats to natural resource areas in Florida.

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Summary: Information on common names, synonyms, and the distributional range of species.

Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?26300 [Accessed 28 October 2003]

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http://plants.usda.gov/java/nameSearch?mode=Scientific+Name&keywordquery=Paederia+foetida&go.x=14&go.y=7 [Accessed 28 October 2005]