

*Paederia foetida* [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Rubiales	Rubiaceae

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

**Synonym** *Paederia scandans* , (Lour.) Merr.  
*Paederia chinensis* , Hance  
*Paederia tomentosa* , Blume

**Similar species** *Paederia cruddasiana*

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



# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Paederia foetida*

## 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

Preventative measures: A [Risk Assessment of \*Paederia foetida\*](#) 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.

Chemical: 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.

Physical: 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:** [Paederia foetida \(Langeland and Burks, 2000\)](#)  
[Paederia foetida \(Starr et al. 2003\)](#)

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

**Review:** Paul D. Pratt, Ph.D. USDA/ARS. Invasive Plant Research Laboratory Fort Lauderdale, Florida USA

**Publication date:** 2006-03-23

## ALIEN RANGE

[1] BRAZIL

[9] UNITED STATES

## BIBLIOGRAPHY

18 references found for *Paederia foetida*

### Management information

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.

**Summary:** A study on the use of a screening system to assess proposed plant introductions to Hawaii or other Pacific Islands and to identify high-risk species used in horticulture and forestry which would greatly reduce future pest-plant problems and allow entry of most nonpests. Gann, George and Gordon, Doria R., 1998. *Paederia foetida* (skunk vine) and *P. cruddasiana* (sewer vine): Threats and management strategies. Natural Areas Journal. 18(2). 169-174.

[Langeland, K. A., R. K., Stocker, and D. M., Brazil. UNDATED. Natural Area Weeds: Skunkvine \(Paederia foetida\). Florida Cooperative Extension Service: Institute of Food and Agricultural Sciences: University of Florida.](#)

**Summary:** Information on description, economic importance, distribution, habitat, history, growth, and impacts and management of species.

Available from: <http://edis.ifas.ufl.edu/WG208> [Accessed 28 October 2003]

Pemberton, R. W. and Pratt, P. D. 2002. In: Van Driesche, R., *et al.* 2002, Biological Control of Invasive Plants in the Eastern United States, USDA Forest Service Publication FHTET-2002-04, 413 p.



# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Paederia foetida*

Pemberton, R. W., K. Muari, P. D. Pratt, K. Teramoto. 2004. *Dulinius conchatus* Distant (Hemiptera:Tingidae), considered and rejected as a potential biological control agent of *Paederia foetida* L. (Rubiaceae), an invasive weed in Hawaii and Florida. Proceedings of the Hawaiian Entomological Society. In Press

Pratt, P.D. and R.W. Pemberton. Skunk Vine, *Paederia foetida*. In: Biological Control of Invasive Plants in the United States. E.M. Coombs, J. Clark, G. Piper, and A. Cofrancesco, eds. Oregon State Univ. Press. Pp. 449.. (Book Chapter).

[Starr, F., K. Starr, and L. Loope. 2003. \*Paederia foetida\*. United States Geological Survey: Biological Resources Division, Haleakala Field Station, Maui, Hawaii.](#)

**Summary:** Information on description, economic importance, distribution, habitat, history, growth, and impacts and management of species.

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

Walker, S. E; El-Gholl, N. E; Pratt, P. D and Schubert, T. S., 2001. First U.S. report of *Pseudocercospora paederiae* leaf spot on the invasive exotic *Paederia foetida* Plant Disease. 85(2). 232.

## General information

Diamond, Pete., 1999. *Paederia foetida* (Rubiaceae), new to the flora of North Carolina. Sida Contributions to Botany. 18(4). 1273-1276.

[IFAS \(Institute of Food and Agricultural Sciences\). 2001. \*Skunk vine \(Paederia foetida\)\*. University of Florida, IFAS, Center for Aquatic and Invasive Plants.](#)

**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=plgt&p\\_lang=](http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Paederia+foetida&p_format=&p_ifx=plgt&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.

Available from: [http://www.fleppc.org/ID\\_book/paederia%20foetida.pdf](http://www.fleppc.org/ID_book/paederia%20foetida.pdf) [Accessed 30 December 2004]

Pratt, Paul D. and Pemberton, Robert W, 2001. Geographic expansion of the invasive weed *Paederia foetida* into tropical south Florida Castanea. 66(3), September, 307.

Puff, C. 1991. Medicinal uses of *Paederia* L. Opera. Bot. Belg. 3:159-164.

Puff, C. 1991. Revision of the genus *Paederia* L. (Rubiaceae-Paederieae) in Asia. Opera Botanica Belgica:207-289.

Starr, Forest; Martz, Kim; and Loope, Lloyd L., 1998. New plant records from East Maui for 1998 Bishop Museum Occasional Papers.(59). 11-15.

[USDA-GRIN \(Germplasm Resources Information Network\). 2003. \*Paederia foetida\*. National Genetic Resources Program \[Online Database\] National Germplasm Resources Laboratory, Beltsville, Maryland.](#)

**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]

[USDA-NRCS \(Natural Resource Conservation Service\). 2002. \*Paederia foetida\*. The PLANTS Database Version 3.5 \[Online Database\] National Plant Data Center, Baton Rouge, LA](#)

**Summary:** Available from:

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