

Verbena rigida [简体中文](#) [正體中文](#)

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Lamiales	Verbenaceae

Common name urgebao (Spanish), slender vervain (English), jarvao (Spanish), slank jernurt (Danish), handy garden verbena (English), lila vasfu (Hungarian), verveine (French), large-veined verbena (English), sporýš tuhý (Czech)

Synonym *Verbena bonariensis*, L. var. *rigida* (Spreng.) Kuntze
Verbena venosa, Gillies & Hook
Verbena rigida, Spreng. var. *lilacina* (Harrow) Moldenke
Verbena rigida, var. *obovata*
Verbena rigida, forma *obovata* Hayek
Verbena bonariensis, L. forma *venosa* (Gillies & Hook.) Voss
Verbena bonariensis, L. forma *venosa* (Gillies & Hook.) Chodat
Verbena bonariensis, L. forma *robustior* Chodat
Verbena doniana, Steud.
Verbena rigida, Spreng. var. *reineckii* (Briq.) Moldenke
Verbena rigida, Spreng. forma *paraguayensis* Moldenke
Verbena rigida, Spreng. var. *glandulosa* Moldenke
Verbena rigida, Spreng. var. *alba* Moldenke
Verbena rugosa, D.Don
Verbena scaberrima, Cham.

Similar species

Summary *Verbena rigida* is a perennial herb native to South America. It is popular for garden cultivation due to its conspicuous bright purple flowers that have an extended blooming period. However it has escaped cultivation in a number of countries around the world and has invaded native grasslands, crop fields and roadside areas.



[view this species on IUCN Red List](#)

Species Description

Verbena rigida is a perennial herb that reaches 50-60cm in height. It has erect to spreading stems that ascend from creeping rhizomes. Leaves are simple with pinnate venation, dark green in colour, oblong in shape, stalkless and measure 5-10cm in length. They are coarsely serrated, pointed, rigid and covered in rough hairs. Leaf arrangement is opposite/subopposite. Stems end in cylindrical spikes of small fragrant bright purple flowers. Flowers bloom in October - December. Corolla tubes measure up to 9mm long, fruiting spikes measure 20-50mm long. Fruits are dry, separating at maturity into 4 one-seeded segments. Seeds are known as mericarps and measure 2mm long (Moore, 2006; Gilman, 1999; Botanic Gardens Trust, 2009; Sapia News, 2010; Shoot, Undated).

Please visit PlantSystematics.org and [USDA Plants Profile for *Verbena rigida*](http://USDA Plants Profile for Verbena rigida) for high quality images of *Verbena rigida*.

Uses

Verbena rigida has an extended blooming period which shows off its vibrant purple colour (Moore, 2006). It is often used for mass planting, ground cover and for flower arrangements (Gilman, 1999). It is heat and drought tolerant making it useful for xeriscaping (Canberra Institute of Technology, 2004). Like many plants, *V. rigida* can also be used for erosion control on banks and slopes (Moore, 2006). Its fragrant purple flowers are also used for attracting butterflies and bees (Gilman, 1999).

Habitat Description

Verbena rigida is capable of naturalizing in habitats that range from disturbed areas to natural forests. In Australia, *V. rigida* has invaded woodlands, riverbanks and grasslands (Hunter, 1999). In South Africa it is becoming a common roadside weed and has established in climax grasslands (B. van Wyk, pers. comm. in Sapia News, 2010). *V. rigida* is a popular ornamental species that can flourish in urban environments and is planted along roadsides and highway medians because of easy maintenance and colour (Diamond Jr., 1985).
It grows in full sunlight, is very heat tolerant and moderately tolerant to drought, preferring moist but well-drained soils. It can grow in acidic, alkaline and neutral soil pH and on most soil types including sand, loam and clay and chalk (Gilman, 1999; Shoot, Undated).

Reproduction

The spread of *Verbena rigida* is facilitated by long white rhizomes that help to form dense colonies of the species by spreading out like underground stems in all directions (Russ, 2007). Seeds also play a major role in propagation of *V. rigida* but their dispersal methods are unclear (Davison, 1999).

Nutrition

Verbena rigida needs full exposure to the sun, and can use reflected sunlight to fulfill this requirement. *V. rigida* is drought tolerant and requires low amounts of water for survival. It was found that the best landscape performance was with regular irrigation every few weeks (Moore, 2006). In order to see a positive growth rate for *V. rigida* the soil must be well-drained and the surrounding area must be free from competition and overcrowding to ensure air circulation (Russ, 2007).

General Impacts

Gilman (1999) describes *Verbena rigida* as an aggressive, spreading plant. *V. rigida* has invaded woodlands, riverbanks, grasslands (Hunter, 1999) and cotton fields in Australia (Johnson & Hazlewood, 2002). It is a common roadside weed in South Africa.
Pammel (1911 in Schmidt, 2010) and Mitchell & Rook (1979 in Avalos & Maibach, 1999) note that *V. rigida* can cause dermatitis on contact with human skin.

Principal source:

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

Review: Expert review underway.

Publication date: 2010-05-07

ALIEN RANGE

[3] AUSTRALIA
[1] BERMUDA
[1] DENMARK
[1] FRANCE
[1] JAPAN

[1] BELGIUM
[1] CZECH REPUBLIC
[2] EL SALVADOR
[1] HUNGARY
[1] MEXICO

[4] NEW CALEDONIA	[1] NEW ZEALAND
[2] PORTUGAL	[1] PUERTO RICO
[1] REUNION	[1] SOUTH AFRICA
[1] SWAZILAND	[1] SWEDEN
[1] TANZANIA, UNITED REPUBLIC OF	[3] UNITED KINGDOM
[15] UNITED STATES	

BIBLIOGRAPHY

46 references found for *Verbena rigida*

Management information

Barker, J. and Randall, R. and Grice, T. May, 2006. Weeds of the future? Threats to Australia's grazing industries by garden plants. Published by Meat & Livestock Australia Limited

Summary: A report that identifies introduced garden plants and other species that present a significant risk to Australia's grazing industry. [Environmental Weed Rating \(EWR\): APPENDIX 1:](#)

Summary: This report documents and ranks various weeds in Australia based on set criteria.

Available from: http://www.naturebase.net/pdf/plants_animals/environmental_weed_strategy_appendices.pdf [Accessed 15 February 2008]

[Varnham, K. 2006. Non-native species in UK Overseas Territories: a review. JNCC Report 372. Peterborough: United Kingdom.](#)

Summary: This database compiles information on alien species from British Overseas Territories.

Available from: <http://www.jncc.gov.uk/page-3660> [Accessed 10 November 2009]

General information

[African Flowering Plants Database., undated. *Verbena rigida* Spreng. South African National Biodiversity Institute \(SANBI\)](#)

Summary: A database supported by South Africa that has facts on the distribution, status, and ecology of various plants within the continent of Africa.

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Summary: Provides basic species information and distributions within the state of Florida.

Available from: <http://www.plantatlas.usf.edu/main.asp?plantID=1335> [Accessed 20 February 2008]

Avalos, J. & Maibach, H.I. 1999. Dermatologic Botany. Dermatology: Clinical and Basic Science Series.

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Summary: Available from:

http://www.rbgsyd.nsw.gov.au/science/Evolutionary_Ecology_Research/Ecology_of_Cumberland_Plain_Woodland/woodland_plants/verbena_rigida [Accessed 7 June, 2010]

[Calflora. 2008. Information on California plants for education, research and conservation. Berkeley, California: The Calflora Database. *Verbena rigida*.](#)

Summary: Site that displays information regarding distribution and general information on *Verbena rigida*.

Available from: http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=8756 [Accessed 26 February 2008]

[Canberra Institute of Technology. 2004. Drought tolerant plants suitable for water saving & Xeriscape Gardens. CiT Dept of Horticulture Weston Campus.](#)

Summary: Available from: http://www.actewagl.com.au/publications/Xeriscape_List.pdf [Accessed 7 June, 2010]

[DAISIE \(Delivering Alien Invasive Species Inventories for Europe\) 2008. Species Factsheet: *Verbena rigida* Spreng.](#)

Summary: Available from: <http://www.europe-aliens.org/speciesFactsheet.do?speciesId=19178>

[Davison, E. 1999. Ground Covers for Arizona Landscapes. Department of Plant Sciences, University of Arizona.](#)

Summary: Report that explores appropriate ground covers for different landscape types in Arizona.

Available from: <http://ag.arizona.edu/pubs/garden/az1110.pdf> [Accessed 21 February 2008]

Diamond Jr., A.R., M. Woods, J. A. Hall, B. H. Martin. 2002. The Vascular Flora of the Pike County Pocosin Natrue Preserve, Alabama. Southeastern Naturalist. 1(1):45-54.

Summary: Journal article that discusses the vascular plants of Pocosin Nature Preserve in Alabama, how they got there and which species are there now.

[Digital Atlas of the Virginia Flora. 2008. Virginia Botanical Associates. *Verbena rigida*.](#)

Summary: Website that displays a digital atlas of the flora of Virginia and their distribution.

Available from: http://www.biol.vt.edu/digital_atlas/index.php?do=plant&plant=3660 [Accessed 21 February 2008]

Esler, A.E., 1988. The naturalisation of plants in urban Auckland, New Zealand 6. Alien plants as weeds. New Zealand Journal of Botany, 1988, Vol. 26: 585-618

Summary: A continuation study of the first Esler source (Esler, 1987) that discusses the role of alien plants as weeds and defines characteristics of each as it pertains to the specfic region of New Zealand.

Esler, A. E. & Sandra J. Astridge., 1987. The naturalisation of plants in urban Auckland, New Zealand 2. Records of introduction and naturalisation* New Zealand Journal of Botany, 1987, Vol. 25: 523-537

Summary: Study done that records the introduction and naturalisation of plants in the urban areas of Auckland, New Zealand.

[Evans, E. 2005. NC State University College of Agriculture and Life Sciences. Plant Fact Sheets. Online database. *Verbena rigida*.](#)

Summary: Website that includes information on various plants.

Available from: http://www.ces.ncsu.edu/depts/hort/consumer/factsheets/groundcover/verbena_rigida.html [Accessed 21 February 2008]

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[Global Biodiversity Information Facility \(GBIF\), 2008. Species: *Verbena rigida* Spreng.](#)

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[Global Compendium of Weeds \(GCW\), 2007. *Verbena rigida* \(Verbenaceae\).](#)

Summary: A summary of information about *Verbena rigida* from the Global Compendium of Weeds that also provides references.

Available from: http://www.hear.org/gcw/species/verbena_rigida/ [Accessed 15 February 2008]

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Summary: This study documented information on the wild vascular plants that grow freely on the East Cape region of North Island, New Zealand.

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Summary: This publication gives relevant information for the vegetation and floristics of Kwaimbal National Park in Ashford, New South Wales, Australia.

[ITIS \(Integrated Taxonomic Information System\), 2008. Online Database *Verbena rigida* Spreng.](#)

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.

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Summary: Summary of the introduced plants to the Gulf States.

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Summary: A report covering the distributions of members of the families Verbenaceae and Avicenniaceae over a broad scope.

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[New Zealand Plant Conservation Network \(NZPCN\). 2005. Online database. *Verbena rigida*.](#)

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Summary: Available from: <http://www.nobanis.org/speciesInfo.asp?taxalD=8318>

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Summary: Available from: http://www.bayoupreservation.org/html/BPA_exotics.pdf [Accessed 7 June, 2010]

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[Sapia \(Southern African Plant Invaders Atlas\) News. 2010. Sapia News No. 15. ARC-Plant Protection Research Institute, No. 15.](#)

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Taylor, Constance E.S.; Lawrence K. Magrath, Patricia Folley, Paul Buck, and Sydney Carpenter., 1996. Oklahoma Vascular Plants: Additions and Distributional Comments. Proc. Okla. Acad. Sci. 76:31-34 (1996)

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