Verbena brasiliensis 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Lamiales	Verbenaceae

Common name Brazilian vervain (English), gin case (English)

Synonym
Verbena quadrangularis , Vell.
Verbena litoralis , var. *brasiliensis* Vell.
Verbena bonariensis , auct. non L.
Verbena litoralis , var. *pycnostachya* Schauer
Verbena litoralis , var. brevibracteata (Kuntze) N. O'Leary

Similar species *Verbena bonariensis, Verbena litoralis*

Summary Verbena brasiliensis is a herb native to South America. It displaces native vegetation through most of its non-native range and is considered invasive. Management for Verbena brasiliensis includes avoiding its introduction into new areas and using herbicide where necessary.

view this species on IUCN Red List

Species Description
Verbena brasiliensis is an annual or short-lived perennial herb with erect, hispid, quadrangular stems of 1-2.5 metres in height. Upper branches are 4-9cm long, opposite, and ascending. Opposite, elliptic leaves are simple and serrate, 4-10cm long by 0.8-2.5cm wide. Leaves are generally hispid, with veins on undersides bearing large bristles. Bracted flowers are borne on terminal, loosely arranged spikes which are 0.5-4.5cm long by 4-5cm wide and are arranged in triads. Lanceolate bracts subtend the 5-lobed calyx, which is 2-3.5mm long, with lobes united nearly to the apex. The bluish purple corolla is salverform, zygomorphic, and is exserted from the calyx slightly. The tube is 2.75-3.25mm long and lobes are less than 1mm in length. Bracts, calyx, and corolla tube are all pubescent. Anthers are attatched in the upper part of the corolla tube. Fruit is a schizocarp which usually produces 2 brown nutlets, 1.2-1.9mm long (Radford, Ahles, and Bell, 1968, Yeo, 1990).

Habitat Description
Verbena brasiliensis is a facultative wetland species that can be found both in wetland/riparian areas as well as in drier, upland habitat (USDA, 2007). In its native areas it is found in dry fields and arable land as a weedy species (Verloove, 2006), but in areas in which it is invasive it thrives in riverine areas or roadsides, old fields, and other disturbed areas (Hoagland and Johnson, 2004; Verloove, 2006).

Reproduction
Verbena brasiliensis reproduces sexually by the production of seeds.

General Impacts
Verbena brasiliensis is an invasive plant that may threaten native plants species by displacing them (SE-EPPC, 2007). It is considered a significant invasive species of the mid-south United States (Maddox, Byrd, and Madsen, 2005), and is prohibited on National Forest System Lands of the United States (SE-EPPC, 2007).

Management Info
Preventative measures: In an effort to manage the species, *Verbena brasiliensis* should not be planted or sold as an ornamental (SE-EPPC, 2007).
Chemical: The herbicide Triclopyr 480. has been used in Gauteng, South Africa for the eradication of *V. brasiliensis* (GEMCA, 2009). 2,4-D (2,4-D L.V. 4 ESTER & 2,4-D L.V. 6 ESTER) is reported to provide good control of *V. brasiliensis*.
A new herbicide Oustar (a new pre-mixed blend of hexazinone (Velpar DF) & sulfometuron (Oust XP)) was tested at six sites in the southeastern US for herbaceous weed control and resultant loblolly pine seedling performance. Certain Oustar (0.91 and 1.33 kg) treatments were found colonized by *V. brasiliensis* more than plots treated with other rates (Yeiser *et al* 2004). It is observed that *V. brasiliensis* is tolerant of sulfometuron and hexazinone, the active ingredients in Oustar (DuPont, 2002, 2003 in Yeiser *et al* 2004).
The Weed Control Methods Handbook provides you with detailed information about the tools and techniques available for controlling invasive plants, or weeds, in natural areas. This Handbook is divided into eight chapters, covering a range of different control methods: manual, mechanical, promoting competition from native plants, grazing, biocontrol, herbicides, prescribed fire, solarization, flooding, and other, more novel, techniques. Each control method has advantages and disadvantages in terms of its effects against the target weed(s), impacts to untargeted plants and animals, risks to human health and safety, and costs.

Pathway
In Belgium and Britain *Verbena brasiliensis* may have been introduced with cereal and wool trade, respectively.

Principal source: Southeast Exotic Pest Plant Council (SE-EPPC) Website. Bugwood Network, The Univeristy of Georgia. Viewed July 25 2007
Verloove, 2006. *Verbena brasiliensis* (Verbenaceae), a new record for the flora of Georgia (former USSR)

Compiler: National Biological Information Infrastructure (NBII), Comité français de l'UICN (IUCN French Committee) & IUCN SSC Invasive Species Specialist Group (ISSG)
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ALIEN RANGE

[5] AUSTRALIA
[1] COOK ISLANDS
[1] GEORGIA
[1] INDONESIA
[1] JAPAN
[1] MADAGASCAR
[1] MOZAMBIQUE
[2] NEW ZEALAND
[1] PORTUGAL
[1] SOUTH AFRICA
[1] TAIWAN
[1] UNITED KINGDOM
[1] ZIMBABWE
[1] CONGO, THE DEMOCRATIC REPUBLIC OF THE
[1] FIJI
[1] HONG KONG
[2] ITALY
[1] KENYA
[1] MEXICO
[1] NEW CALEDONIA
[1] PAPUA NEW GUINEA
[1] REUNION
[1] SPAIN
[1] TANZANIA, UNITED REPUBLIC OF
[16] UNITED STATES

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Summary: An article reviewing *V. brasiliensis* and its close congenors *V. bonariensis* and *V. litoralis*. Differentiates between the species by giving lengthy descriptions of their morphology . Also provides an extensive world-wide distribution list.