GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Bambusa vulgaris***

Bambusa vulgaris 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

Common name

Synonym

Arundarbor arundinacea , (Retz.) Kuntze
Arundarbor bambos , Kuntze, Rev. Gen. Pl. 2, 1891
Arundarbor blancoi , (Steudel) Kuntze 1891
Arundarbor fera , (Miquel) Kuntze 1891
Arundarbor fera , Rumphius 1743
Arundarbor monogyna , (Blanco) Kuntze 1891
Arundo bamboa , Miller 1768
Arundo bambos , L.
Arundo fera , Oken 1841
Bambos arundinacea , Retz.
Bambusa arundinacea , var. *picta* Moon 1824
Bambusa auriculata , Kurz ex Cat. Hort. Bot. Calc., 1864
Bambusa balcooa , Roxburgh 1832
Bambusa bambos , (L.) Voss
Bambusa blancoi , Steudel 1854
Bambusa capensis , Rupr.
Bambusa fera , Miquel 1857
Bambusa humilis , Reichenbach ex. Ruprecht 1839
Bambusa madagascariensis , hort. ex A. & C. Rivi&#xfffd;re 1878
Bambusa mitis , Blanco 1837
Bambusa monogyna , Blanco 1837
Bambusa sieberi , Grisebach 1864
Bambusa striata , Lodd.
Bambusa surinamensis , Ruprecht 1839
Bambusa thouarsii , Kunth 1822
Bambusa tuldoides , Munro
Bambusa vasaria , Herbier Hamilton
Dendrocalamus balcooa , (Roxburgh) Voigt 1845
Leleba vulgaris , (Schrader ex Wendland) Nakai 1933
Nastus thouarsii , (Kunth) Raspail 1825
Nastus viviparus , Raspail 1825
Phyllostachys striata , (Lodd. ex Lindl.) Nakai

Similar species

Summary

Bambusa vulgaris is the most widespread member of its genus, and has long been cultivated across the tropics and subtropics. It prefers lowland humid habitats, but tolerates a wide range of climatic conditions and soil types. It commonly naturalises, forming monospecific stands along river banks, roadsides and open ground.

view this species on IUCN Red List

Species Description
Although *Bambusa vulgaris* is taxonomically a grass, its habit is tree-like. It forms dense stands of cylindrical, jointed woody stems up to 20m in height and 4-10cm in diameter; leafy branches at nodes, with narrow lanceolate leaves up to 30cm long.

Lifecycle Stages
Bambusa vulgaris reproduces almost exclusively by vegetative means. \"Flowering is extremely rare\" (Quatrocchi 2006).

Uses
Bambusa vulgaris is used for construction of houses, huts, boats, fences, props and furniture; as raw material for paper pulp; shoots are rarely used as a vegetable or as livestock fodder (although toxic effects to horses noted by Barbosa *et al*. 2006); planted as ornamental or boundary marker; used to support banana plants; split stems used for brooms, baskets; in New Guinea, culms used to make combs and penis gourds; used to make musical instruments; medicinal uses include as abortifacient, for kidney troubles, leaves used as sudorific and febrifuge agents, sap to treat fever and hematuria, tabasheer from culm internodes to treat infantile epilepsy, bark astringent and emmenagogue (Ohrnberger 1999; Quatrocchi 2006).

Habitat Description
Bambusa vulgaris \"Occurs spontaneously or naturalised mostly on river banks, road sides, wastelands and open ground; generally at low altitudes. In cultivation it thrives best under humid conditions up to 1000m altitude, but tolerates unfavourable conditions as well: dry season (plants may become completely defoliated); low temperature (grows up to 1200m altitude, survives -3 degrees C); also tolerates a wide range of soil types.\" (Ohrnberger 1999, p. 279)

General Impacts
Bambusa vulgaris forms extensive monospecific stands where it occurs, excluding other plant species.
B. vulgaris colonises along streams into forest (Blundell *et al*. 2003)

Management Info
Preventative measures: A Risk Assessment of *Bambusa vulgaris* 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 5 and a recommendation of: \"the plant requires further evaluation in Hawai'i and on other Pacific Islands as determined by a low WRA score, which is based on published sources describing species biology and behaviour in Hawai'i and/or other parts of the world.\"
Physical: Digging plants out may require heavy equipment. Continuing removal will probably be necessary due to resprouting. Continued cutting or mowing will eventually kill most plants by exhausting food reserves. Livestock will graze shoots but cannot bring down large plants once established (PIER 2007). Toxic effects have been noted in horses that ingested large quantities of leaves (Barbosa *et al*. 2006).
Chemical: Remove tops and spray regrowth with Glyphosate or Amitrole 2%, or imazapyr or glyphosate plus fluazifop. Velpar can be used but is persistent in the soil. However, it has been reported that glyphosate does not adequately translocate to the rhizomes (PIER 2007).
The effectiveness of the use of herbicides to eradicate weedy bamboo was investifgated in Puerto Rico. The study Cruzado *et al*, (1961) found that out of the 25 different compunds tested on a total of 12 bamboo species, the most effective treatements were the application of monuron, TCA and dalapon to the bases of intact or cut bamboo culms and the use of amitrole as a spray for regrowth. Combinations of these treatments were found to be most effective againast *B. vulgaris*. The authors note that highly resistant species required a second treatment. They also note that decaying of dead bamboo is slow.

Pathway
Bambusa vulgaris was introduced into European botanic gardens (Ohrnberger 1999)*Bambusa vulgaris* are planted on slopes to control erosion (Quatrocchi 2006)*Bambusa vulgaris* stems are used for houses, huts, fences, banana plant supports (Quatrocchi 2006)

Principal source:

Compiler: Interim compiled by Ben Phalan, Conservation Science Group Department of Zoology University of Cambridge United Kingdom & IUCN/SSC Invasive Species Specialist Group (ISSG)
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Review:

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ALIEN RANGE

[1] AMERICAN SAMOA
[1] BRAZIL
[1] CHINA
[1] COSTA RICA
[3] FRENCH POLYNESIA
[1] INDIA
[1] JAMAICA
[2] KIRIBATI
[2] MARSHALL ISLANDS
[9] MICRONESIA, FEDERATED STATES OF
[1] NEW CALEDONIA
[6] NORTHERN MARIANA ISLANDS
[1] PUERTO RICO
[1] SAINT LUCIA
[5] TONGA
[1] VIRGIN ISLANDS, U.S.
[1] AUSTRALIA
[1] BRITISH INDIAN OCEAN TERRITORY
[6] COOK ISLANDS
[3] FIJI
[1] GUAM
[1] INDO-CHINA
[1] JAPAN
[1] MADAGASCAR
[1] MEXICO
[1] NAURU
[1] NIUE
[6] PALAU
[1] REUNION
[1] SAMOA
[2] UNITED STATES

BIBLIOGRAPHY
17 references found for **Bambusa vulgaris**

Managment information
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Cruzado, H. J., T. J. Muzik and W. C. Kennard. 1961. Control of Bamboo in Puerto Rico by Herbicides. Weeds Vol. 9, No. 1 (Jan., 1961), pp. 20-26
Global Compendium of Weeds (GCW)., 2007. *Bambusa vulgaris* (Poaceae)
Summary: Available from: http://www.hear.org/gcw/species/bambusa_vulgaris/ [Accessed 18 July 2008]
IUCN/SSC Invasive Species Specialist Group (ISSG)., 2010. A Compilation of Information Sources for Conservation Managers.
Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.
Pacific Island Ecosystems at Risk (PIER), 2005. Risk assessment: *Bambusa vulgaris*
Summary: Available from: http://www.hear.org/pier/wra/pacific/bambusa_vulgaris_htmlwra.htm [Accessed 9 December 2009]
Weeds of Hawai&#65533;i&#65533;s Pastures and Natural Areas; 2003. *Bambusa vulgaris*: In An Identification and Management Guide by P. Motooka *et al.* &#65533;2003, College of Tropical Agriculture and Human Resources, University of Hawai&#65533;i at M&#65533;noa.
Summary: Available from:http://www.ctahr.hawaii.edu/forestry/Data/WeedsHI/W_Bambusa_vulgaris.pdf [Accessed 18 July 2008]

General information

Barbosa, J. D., de Oliveira, C. M. C., Duarte, M. D., Riet-Correa, G., Peixoto, P. V. and Tokarnia, C. H. 2006. Poisoning of horses by bamboo, *Bambusa vulgaris*. Journal of Equine Veterinary Science 26(9): 393-398.
Summary: Abstract: The clinical and pathological aspects of a neurological disease observed in 16 horses in Para, Amazonia, Brazil, are presented. The symptoms were mainly motor incoordination, paresis of the tongue, somnolence, difficulties in apprehension, chewing and swallowing of food, as well as instability and standing with abducted members. The clinical course was subacute or chronic and in most cases was not fatal. Postmortem examination performed in one already very sick, euthanized animal, did not show significant macroscopic lesions; histopathological examination revealed slight edema and degenerative alterations of a few axons, mainly in the *medulla oblongata*. In all pastures where horses were affected, plenty of bamboo had been eaten, probably because of scarcity of pasture. By feeding large amounts of fresh bamboo leaves of this region, in different growing stages, to three horses (horse 1, 47 g/kg/d for 30 days; horse 2, 10 g/kg/d for 60 days; horse 3, 18 g/kg on the first day, and 31 g/kg/d for 6 more days)-the animals ate the leaves unassisted-it was possible to reproduce nervous symptoms essentially identical to those observed in the natural disease 24 to 72 hours after the first feeding of the plant. In spite of continuous administration of the plant, intensity of the clinical signs did not increase. Based on field observations and comparison of the clinical and pathological pictures seen in the natural and experimental disease, the described illness can be concluded to be caused by the ingestion of large amounts of the leaves of *Bambusa vulgaris* f. *vulgaris*.
Clayton, W.D., Harman, K.T. and Williamson, H. 2007. GrassBase - The Online World Grass Flora. *Bambusa vulgaris*
Summary: Available from: http://www.kew.org/data/grasses-db/www/imp01331.htm [Accessed 06 August 2008]
ITIS (Integrated Taxonomic Information System), 2008. Online Database *Bambusa vulgaris* Schrad. ex J.C. Wendl.
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.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=193444 [Accessed 18 July 2008]
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Summary: Describes planting of Bambusa vulgaris, apparently to revegetate deforested areas (full paper not available for reference) Abstract: Adaptation of *Bambusa vulgaris* var. *striata*, *Dendrocalamus giganteus* and *Phyllostachys aurea* to a deforested area in Guanacaste, a northern province of Costa Rica, was studied. Three year old culms and rhyzomes were selected and planted in sunny and shaded areas. *D. giganteus* showed the highest adaptability under sunny as well as shaded habitats, followed by *B. vulgaris* var. *striata*. *P. aurea* was eliminated from this area due to poor development.
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Rashford, J. H. 1995. The Past and Present Uses of Bamboo in Jamaica. Economic Botany 49(4): 395-405.
Summary: Abstract: Bamboos are useful to people wherever they grow and in Jamaica, Bambusa vulgaris is no exception. Introduced in the 18th century, this bamboo is now well established, and has been put to a wide variety of uses from early on. This paper documents the past and present uses of bamboo in Jamaica. Not freely available (cited by PIER 2007)
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