GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Nicotiana glauca***

Nicotiana glauca 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Solanales	Solanaceae

Common name mustard tree (English), tree tabacco (English), tabaco negro (Spanish), wildetabak (Afrikaans), tabac canaque (French), wild tobacco (English), paka (Hawaiian), tabaco moruno (Spanish), gandul (Spanish), guang yan cao (Chinese), kidachi tabako (Japanese), tabaco moro (Spanish)

Synonym

Similar species

Summary Introduced in Hawaii, Ascension, Bermuda, Saint Helena and Canary islands *Nicotiana glauca* thrives in disturbed habitats as well as sandy beaches and coastal areas. It may pose a threat to pristine environments and native wildlife by altering habitats.

view this species on IUCN Red List

Species Description
Nicotiana glauca is a shrub of up to 5 m high with glaucous leaves and tubular yellow flowers (Steenkamp van Heerden & van Wyk 2002).
It is an evergreen perennial, glabrous soft--wooded shrub or small tree, up to 6 m tall,with stems that are laxly branched. The leaves are stalked, alternate, elliptical to lanceolate or oval, pointed, bluish or greyish-green. The\nflowers are greenish-yellow, 30 to 40 mm long, many are borne in a lax panicle. The corolla is tubular with a short-lobed limb. The fruit is an egg-shaped, two-valved capsule, 7 to 10 mm long and slightly longer than the persistent papery calyx. It produces a large quantity of tiny seeds, which can be dispersed by wind and water. All plant parts are extremely poisonous (Goodspeed 1954, Moore 1972, Blamey & Grey-Wilson 1998, in Bogdanovic *et al*. 2006).

Uses
The smoking of *Nicotiana glauca* has been reported and the plant has also been used medicinally and in ethnoveterinary medicine. Warmed leaves are applied to the head to relieve headache, on the throat to relieve pain and put in shoes for painful feet. It has been used as an insecticide, but its use has been discontinued due to\nthe development of more specific and less toxic insecticides (Steenkamp van Heerden & van Wyk 2002).

Habitat Description
Nicotiana glauca is distributed in warm temperate, arid and subtropical, dry and moist regions, beside roadsides and along riverbanks, up to altitudes of 3000 m (Goodspeed 1954, Cronk and Fuller 2001, in Bogdanovic *et al*. 2006). It is widespread throughout South Africa in places where the natural vegetation has been disturbed, such as roadsides and riverbanks (Steenkamp van Heerden & van Wyk 2002).

General Impacts
The Global Compendium of Weeds lists *Nicotiana glauca* as an agricultural weed, casual alien, cultivation escape, environmental weed, garden weed and noxious weed (GCW 2007). The species is reported as invasive in the western Mediterranean and, recently, in Croatia (Bogdanovic *et al*. 2006). ;According to Cronk and Fuller (2001) *N. glauca* belongs\nto the invasive category 3: invading seminatural or natural habitats which are of some conservation interest (in Bogdanovic *et al*. 2006).
On Ascension Island it may pose a threat to the previously pristine area of the Hummock Point nature reserve. As it establishes well in coastal areas it could affect nesting turtles (Varnham 2006). *N. glauca* is recorded as invasive in the Canary Islands (Spain) (Brandes & Fritzsch 2002).
Anabasine, the toxic alkaloid of *N. glauca* has been linked to human fatalities. In the cases documented it was found to be accidentally collected with traditional spinach (marog) (Steenkamp van Heerden & van Wyk 2002). Animal deaths, mainly of ostriches, have also been reported (Steenkamp van Heerden & van Wyk 2002).

Management Info
Physical: Hand pull or dig out seedlings and young plants.
Chemical: Cut large plants and treat the stumps with herbicide. In South Africa the plants are cut and stumps treated with 2,4,5-T (Cronk & Fuller 2001, in PIER 2007).
Biological: Successful control has been achieved where the plants were sprayed with herbicide and the exposed to the beetle *Malabris aculeata* (Cronk & Fuller 2001, in PIER 2007).

Principal source:

Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)

Review:

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ALIEN RANGE

[1] AUSTRALIA
[1] EGYPT
[2] FRANCE
[2] GREECE
[3] ITALY
[1] MEDITERRANEAN AREA
[1] MOROCCO
[1] NEW CALEDONIA
[1] PORTUGAL
[1] SOUTH AFRICA
[1] TUNISIA
[1] UNITED KINGDOM
[1] CROATIA
[1] FINLAND
[1] GIBRALTAR
[1] ISRAEL
[1] MARSHALL ISLANDS
[1] MEXICO
[1] NAMIBIA
[1] NEW ZEALAND
[2] SAINT HELENA
[2] SPAIN
[1] UKRAINE
[9] UNITED STATES

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Global Compendium of Weeds (GCW). 2007. *Nicotiana glauca* (Solanaceae)
Summary: Available from: http://www.hear.org/gcw/species/nicotiana_glauca/ [Accessed 14 August 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.
Pickup, A.R. 1999. Ascension Island Mangement Plan. Published by The Royal Society for the Protection of Birds, Sandy, Beds, UK.
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.
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ITIS (Integrated Taxonomic Information System), 2008. Online Database. *Nicotiana glauca* Graham
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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