

GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Nassella tenuissima



Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

Common name Texas tussock grass (English), elegant spear grass (English, Australia), Texas

> tussock (English), ponytail grass (English), fine-stemmed needle grass (English), white tussock (English), angel's hair (English, Australia), pony tail (English, Australia), Mexican needle grass (English), Mexican feather grass

(English)

Synonym Stipa tenuissima, Trin.

> Stipa cirrosa, E. Fourn. Stipa subulata , E. Fourn. Stipa oreophila, Speg.

Stipa tenuissima, var. oreophila (Speg.) Speg.

Stipa tenuissima, var. planicola Speg.

Similar species Nassella spp.

Nassella tenuissima)commonly known as Mexican feather grass) can be a Summary

weed in its native range at sites under high disturbance, such as that caused by overgrazing. It forms indigestible balls in the stomach of stock and, if they are forced to graze the infected pasture, they may lose weight and die, as Nassella tenuissima has a high fibre content and a low nutritive value. It is an extremely vigorous, invasive plant, which crowds out desirable pasture species, reducing stock carrying capacity. Nassella tenuissima can also crowd

out native grasses in coastal or open areas. It is used for ornamental purposes and is available for sale in nurseries. In recent times, it has been promoted for

'its light and airy nature'.



view this species on IUCN Red List

Species Description

Nassella tenuissima is a graceful, delicate and very fine textured ornamental grass. It grows in a dense fountain like clump with slender, wiry culms 0.3-0.6m tall. The leaves are 15.2-35.6cm long, 0.5mm wide, rolled inward very tightly so that they appear as thin wiry filaments (Christman, 2004). It blooms in late spring with a greenish flower cluster that persists well into fall as it ripens to golden brown (Christman, 2004). Flowers grow in unequal size; a single bisexual floret, which is longer than the floret; flower head, is often only partly exerted and spread from the end (DPI, 2004). Silvery inflorescence between summer to fall and becomes light straw coloured in fall (Evans, 2000). The main body of the seed is 2 to 3mm long DPI (2004). Young seedheads held among the leaves; mature seedhead to 25cm long; glumes to 1cm long; callus bearded (AWC, 2004).

Notes

Australian Quarantine in 1998 permitted the legal import of Nassella tenuissima despite all Nassella species are prohibited, because of a slip related to the species synonym. The importer used its old taxonomic name, Stipa tenuissima, in the import proposal, which was permitted.



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Nassella tenuissima

Lifecycle Stages

In La Pampa, Argentina, *Nassella tenuissima* vegetates in autumn, flowers in November and sets seed in December-January (Freda Anderson., pers.comm., 2005).

Uses

In Argentina *Nassella tenuissima* is being used as an ornamental and in some provinces like Tucumán it is used as thatch (F. Anderson, pers. obs.).

Species of a low nutritional value, with a high fibre content which animals do not consume; its abundance indicates degradation of the pasture (de Agrasar *et al* 2005).

Habitat Description

Nassella tenuissima grows on well drained soil and is very drought tolerant (Christman, 2004).

Reproduction

Nassella tenuissima produces thousands of seeds, which are dispersed by wind, water or contaminated soil. Usually propagated from seed and often self sows (Evans, 2000; Christman, 2004).

Management Info

The plant was introduced into Australia and marketed in nurseries under the names "elegant spear grass", "pony tail" and "angel's hair". Education about its negative impacts and the destruction of existent plant specimens in gardens and nurseries could prevent this weed from becoming introduced into new countries or regions in the future.

Pathway

Used as an ornamental and sold in nurseries (AWC, 2004).

Principal source:

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG) with support from the Terrestrial and Freshwater Biodiversity Information System (TFBIS) Programme (Copyright statement)

Review: Freda Anderson, Centro de Recursos Naturales Renovables de la Zona Semiárida (CERZOS) - Universidad Nacional del Sur, Bahía Blanca, Argentina.

Pubblication date: 2006-03-23

ALIEN RANGE

[2] AUSTRALIA [5] NEW ZEALAND [1] SOUTH AFRICA

BIBLIOGRAPHY

20 references found for Nassella tenuissima

Managment information

Australian Department of the Environment and Heritage, 2003. Chilean needle grass (Nassella neesiana). Weeds of National Significance: Weed Management Guide Department of the Environment and Heritage and the CRC for Australian Weed Management, 2003.

Summary: Available from: http://www.weeds.gov.au/publications/guidelines/wons/n-neesiana.html [Accessed 23 October 2008] Australian Weeds Committee (AWC). 2004. Weed Identification: Mexican Feather Grass

Summary: Available from: http://www.weeds.org.au/cgi-bin/weedident.cgi?tpl=plant.tpl&ibra=all&card=G13 [Accessed 10 September 2005]

Christman, S. 2004. Nassella tenuissima. Floridata Market Place



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Nassella tenuissima

Department of Primary Industries (DPI). 2004. Mexican Feather Grass: State Prohibited Weed, April.

Summary: Available from:

 $http://www.dpi.vic.gov.au/dpi/nreninf.nsf/93a98744f6ec41bd4a256c8e00013aa9/b1d5649984143eaeca256e8d001bcabf/\$FILE/LC0263.pdf\\ [Accessed 10 September 2005]$

Department of Primary Industries State of Victoria, Australia, 2003. New State Prohibited Weeds proclaimed, Pest Plant and Animal Management News, Under Control, June 2003, Number 24, ISSN 1328-2425.

Environment Waikato, 2005. Nassella Tussock (Nassella trichotoma) and Fine Stemmed Needle Grass (N. tenuissima)

Evans, E. 2000. Ornamental Grasses Plant Fact Sheets Consumer Horticulture. NC State University.

Summary: Available from: http://www.ces.ncsu.edu/depts/hort/consumer/factsheets/ornamental_grass/nassella_tenuissima.html. [Accessed 10 September 2005]

Glanznig, A. 2005a. Closing Australia s Quarantine Loophole to New Weeds. WWF-Australia, Sydney.

Summary: Available from:

http://www.wwf.org.au/News_and_information/Publications/PDF/Policies_position/issuespaper_quarantine_loophole.pdf [Accessed 10 September 2005]

Glanznig, A. 2005b. Making State Weed Laws Work, WWF-Australia Issues Paper. WWF-Australia, Sydney.

Summary: Available from: http://www.wwf.org.au/News_and_information/Publications/PDF/Policies_position/makingstateweedlawswork.pdf [Accessed 10 September 2005]

Groves, R.H., Boden, R. & Lonsdale, W.M. 2005. Jumping the Garden Fence: Invasive Garden Plants in Australia and their environmental and agricultural impacts. CSIRO report prepared for WWF-Australia. WWF-Australia, Sydney.

Milton, J Sue., 2004. Grasses as invasive alien plants in South Africa. South African Journal of Sciences 100 Jan/Feb 2004

Summary: Available from: http://www.dwaf.gov.za/wfw/Docs/Papers/SAJSFeb2004milton.pdf [Accessed 1 September 2005]

Morfe, T. A; Weiss, J; and McLaren, D. A., 2002. Economics of serrated tussock and Mexican feather grass in Victoria: Why we need to act now Plant Protection Quarterly. 17(3). 86-94.

National Pest Plant Accord, 2001. Biosecurity New Zealand.

Summary: The National Pest Plant Accord is a cooperative agreement between regional councils and government departments with biosecurity responsibilities. Under the accord, regional councils will undertake surveillance to prevent the commercial sale and/or distribution of an agreed list of pest plants.

Available from: http://www.biosecurity.govt.nz/pests-diseases/plants/accord.htm [Accessed 11 August 2005] Royal New Zealand Institute of Horticulture (RNZIH), 2005. Mexican feather grass Nassella tenuissima

Summary: Available from: http://www.rnzih.org.nz/pages/nppa_060.pdf [Accessed 1 October 2005]

General information

Barkworth, M.E. & M.A. Torres. 2001. Distribution and diagnostic characters of *Nassella* (Poaceae: Stipeae). Taxon 50: 439-468. Bellevue Botanical Garden Society (BBGS). 2005. Plant of the Month, July 2005.

Summary: Available from: http://www.bellevuebotanical.org/plantmonth/05_07.htm [Accessed 10 September 2005]

Cano, E. 1988. Pastizales Naturales de La Pampa. Descripción de las especies môs importantes. Tomo I. Convenio AACREA- Provincia de la Pampa. Pp: 425.

de Agrasar, R�golo, Z.E., Steibel P.E. & H.O. Troiani. 2005. Manual ilustrado de las gram�neas de la provincia de La Pampa. UNLP, UNRC. Pp: 359.

ITIS (Integrated Taxonomic Information System), 2005. Online Database Nassella tenuissima

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:

 $http://www.itis.gov/servlet/SingleRpt/SingleRpt/Search_topic=TSN\& search_value=507085 \ [Accessed March 2005] \ [Accessed Ma$

Milton, S.J. 2004. Grasses as invasive alien plants in South Africa, South African Journal of Science 100.

Summary: Avaiilable from: http://www.dwaf.gov.za/wfw/Docs/Papers/SAJSFeb2004milton.pdf [Accessed 16 December 2005]