GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Acanthus mollis***

Acanthus mollis **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Scrophulariales	Acanthaceae

Common name Artist's acanthus (English), sea-dock (English), bear's breech (English), oyster plant (English), acanto-grego (Portuguese, Brazil), bear's breeches (English), sea-holly (English)

Synonym

Similar species *Acanthus spinosus*

Summary *Acanthus mollis* is a dicotyledon herb that has a tall inflorescence - up to 2 m high. It is cultivated for ornamental reasons and often grows in the wild as a garden escape. *A. mollis* is native to southern Europe, Morocco, Tunisia, Algeria, the Mediterranean islands, Turkey, Syria and the Canary Islands.

view this species on IUCN Red List

Species Description
Acanthus mollis is a rhizomatous, perennial herb. It has upright stems that grow up to 1 m long and are hairless. Leaves are borne on petioles up to 50 cm long and are about 30 cm by 50 cm, hairless, and with deeply pinnate lobes that are acutely toothed The characteristic inflorescence, which can bring the total height of the *A. mollis* plant up to 2 m high, has white corollas with purple veins (3.5 - 5 cm long) and appears in summer.Seeds are foremd in dry capsules although most spread appears to be vegetative (Conn 2005; Stace *et al*. Undated a; Williams 2008).

Notes
Acanthus mollis is listed in the FDA Poisonous Plant Database (McGuffin *et al*. 2000; NPPA 2008).

Uses
Acanthus mollis is grown as an ornamental due to its tall, striking inflorescence. *A. mollis* has also been used for medicinal purposes in the past (USDA-ARS 2010).

Habitat Description
Acanthus mollis can grow in a variety of soil types, including clay, and those that are dry and sandy. It prefers light to medium soil types. It can grow in partial shade or full sun; and it is cold hardy and drought tolerant. *A. mollis* is frequently cultivated in gardens; it can be found growing on waste land, roadsides and railway banks. *A. mollis* has also been found in coastal areas, disturbed areas, forests, riparian zones, scrublands and urban areas (ARPS 2007-2012; NPPA undated; Stace *et al*. undated a).

Reproduction
Acanthus mollis reproduces by seed, which is spread *via* water currents, gravity and animals - seed setting occurs two years after germination. It can also reproduce via rhizomes, and vegetatively, via root fragments. (ARC 2008; Hosking *et al.* 2008; Williams 2008).

General Impacts
Acanthus mollis can form dense infestations under forest canopies, which supresses growth and regeneration of native plants species. Although found only in natural ecosystems in Australia, it is thought that *A. mollis* could become an agricultural pest in several states (ARPS 2007-2012; Groves *et al.* 2003; NPPA 2008).

Management Info
Preliminary management has been carried out in Australia and New Zealand. In Australia, *Acanthus mollis* has been noted to require control measures in three or less locations, while it has been included in a list of species requiring research as part of a pest management plan in New Zealand. (ARPS 2007-2012; Groves *et al.* 2003).

Pathway
Acanthus mollis plants found to be growing in places where garden waste is dumped (Hosking *et al.* 2007). *Acanthus mollis* seeds for sale online, for example in New Zealand on a internet auction/classified website, http://www.trademe.co.nz (Trade Me 2010).

Principal source:

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ALIEN RANGE

[2] AUSTRALIA
[1] CYPRUS
[5] NEW ZEALAND
[1] SOUTH AFRICA
[1] UNITED KINGDOM
[1] BRAZIL
[1] ITALY
[1] PORTUGAL
[1] SPAIN
[1] UNITED STATES

BIBLIOGRAPHY
37 references found for **Acanthus mollis**

Managment information
Dehnen-Schmutz, Katharina; Julia Touza; Charles Perrings and Mark Williamson, 2007. The Horticultural Trade and Ornamental Plant Invasions in Britain. Conservation Biology Volume 21, No. 1, 224–231
Summary: Available from: http://www.public.asu.edu/~cperring/Dehnen-Schmutz%20et%20al,%20ConsBiol%20(2007).pdf [Accessed 10 June 2010]
Frankston City Council (FCC) undated. Frankston City Council Weed Guide. Frankston City Council, Victoria, Australia.
Summary: Available from: http://www.frankston.vic.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/262/65.pdf&siteID=18&str_title=Landscape%20Guidelines%20Weed%20Guide.pdf [Accessed 30 August 2010]
Global Compendium of Weeds (GCW), 2007. *Acanthus mollis* (Acanthaceae)
Summary: Available from: http://www.hear.org/gcw/species/acanthus_mollis/ [Accessed 10 June 2010]
Hastwell, Graeme T. & Panetta, F. Dane, 2005. Can differential responses to nutrients explain the success of environmental weeds? Journal of Vegetation Science 16: 77-84, 2005
Healy, A.J., 1958. Contributions to a Knowledge of the Adventive Flora of New Zealand, No 6. Transactions of the Royal Society of New Zealand, Vol 85, Part 4, pp 531-549, November, 1958.
Summary: Available from: http://rsnz.natlib.govt.nz/volume/rsnz_85/rsnz_85_04_005990.pdf [Accessed 10 June 2010]
Horizons Regional Council (HRC) 2007. Regional Pest Plant Management Strategy.
Summary: Available from: http://www.horizons.govt.nz/assets/publications/managing-our-environment/publications-plans-and-strategies/OPERATIVE-RPPMS-September-2007.pdf [Accessed July 15 2010]
Howell, Clayson 2008. Consolidated list of environmental weeds in New Zealand. DOC Research & Development Series 292
Summary: Available from: http://csl.doc.govt.nz/upload/documents/science-and-technical/drds292.pdf [Accessed 10 June 2010]

National Pest Plant Accord (NPPA) New Zealand 2008. Technical advisory group assessment of National Pest Plant Accord species.
Summary: Available from: http://www.biosecurity.govt.nz/files/regs/imports/risk/a-tag-assessments.pdf [Accessed 30 August 2010]
Randall R. 2007. The introduced flora of Australia and its weed status. CRC for Australian Weed Management. Department of Agriculture and Food, Western Australia.
Summary: Available from: http://biosecurity.wa.gov.au/objtwr/imported_assets/content/hort/intro_flora_australia.pdf [Accessed 30 August 2010]
Victorian Government Department of Sustainability and Environment (DSE Vic) 2009a. Advisory list of environmental weeds of the Ranges bioregions of Victoria.
Summary: Available from: http://www.dpi.vic.gov.au/CA256F310024B628/0/F5F999CE3516D3F9CA257615001F79FC/$File/Ranking+Ranges+weeds+rev2a.pdf [Accessed 30 August 2010]
Victorian Government Department of Sustainability and Environment (DSE Vic) 2009b. Advisory list of environmental weeds of the Inland Plains bioregions of Victoria.
Summary: Available from: http://www.dpi.vic.gov.au/CA256F310024B628/0/1D0FB8E465303845CA257615001F11B1/$File/Ranking+Inland+Plains+weeds-rev2a.pdf [Accessed 30 August 2010]
Victorian Government Department of Sustainability and Environment (DSE Vic) 2009c. Advisory list of environmental weeds ofcoastal plains and heathy forests bioregions of Victoria.
Summary: Available from: http://www.land.vic.gov.au/CA256F310024B628/0/3377A17F6DD0826DCA257615001E8074/$File/Ranking+coastal+plains-rev5.pdf [Accessed 30 August 2010]
Weedbusters 2009. Plant me instead! Bay of Plenty region.
Summary: Available from: http://www.envbop.govt.nz/Environment/PlantMeInstead/files/PlantMeInstead.pdf [Accessed 30 August 2010]
Williams P.A. 2008. Biological success and weediness of some terrestrial weeds not present in the Northland Regional Council s RPMS.
Summary: Available from: http://www.envirolink.govt.nz/PageFiles/385/434-nlrc62.pdf [Accessed 30 August 2010]
Yarra City Council 2009. Yarra planning scheme. Yarra, Victoria, Australia.
Summary: Available from: http://www.yarracity.vic.gov.au/IgnitionSuite/uploads/docs/protectionofbiodiversity.pdf [Accessed 30 August 2010]

General information

Ballelli, Sandro & Franco Pedrotti, 2009. Exotic species of the Marches region (Central Italy) and their distribution in diffirent natural vegetation types. Contributii Botanice - 2009, XLIV: 37-47
Summary: Available from: http://contributii_botanice.reviste.ubbcluj.ro/materiale/2009/Contrib_Bot_vol_44_pp_037-047.pdf [Accessed 10 June 2010]
Biondi, Daniela & Jos&#65533; Henrique Pedrosa-Macedo, 2008. Invasive plants observed in the urban area of Curitiba (Plantas Invasoras Encontradas Na Area Urbana De Curutiba, PR) FLORESTA, Curitiba, PR, v. 38, n. 1, jan./mar. 2008.
Summary: Available from: http://ojs.c3sl.ufpr.br/ojs2/index.php/floresta/article/viewFile/11034/7505 [Accessed 10 June 2010]
Casimiro-Soriguer Solanas, Federico; Perez Latorre, Andres V., 2008. First list of alien flora for Malaga province (Spain) Acta Botanica Malacitana. 33 2008. 373-382.
Summary: *Acanthus mollis* L.: Agri&#65533;fito. Centro y Este del Mediterraneo. Posiblemente ornamental. Zonas nitrofilas, siempre en condiciones de umbr&#65533;a como vaguadas y base de cantiles. Distribuida por toda la provincia. Localmente abundante. Castroviejo et al. 2001; MGC; (op). [Se incluye esta especie con reservas al estar citada como aloctona por Castroviejo et al., 2001, pero no por otros autores como Valdes et al., 1987 y Dana et al., 2005]
Conn B.J. 2005. *Acanthus mollis* L.. New South Wales Flora Online.
Summary: Available from: http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acanthus~mollis [Accessed 30 August 2010]
Della, Athena and G. Iatrou, 1995. New Plant Records from Cyprus. Kew Bulletin, Vol. 50, No. 2 (1995), pp. 387-396
Domingues de Almeida, Jo&#65533;o and Helena Freitas, 2006. Exotic naturalized flora of continental Portugal &#65533; A reassessment. Botanica Complutensis 30: 117-130. 2006
Essl, F., 2008. Remarkable floristic records from Vienna, Lower Austria, Burgenland and Styria, part V. Linzer Biologische Beitraege. 40(1). JUL 2008. 341-369.
Foxcroft, Llewellyn C., David M. Richardson and John R. U. Wilson, 2007. Ornamental Plants as Invasive Aliens: Problems and Solutions in Kruger National Park, South Africa. Centre for Invasion Biology, Department of Botany and Zoology, Stellenbosch University, Private Bag X1, Matieland 7602, South Africa
Summary: Available from: http://www.aseanenvironment.info/Abstract/41017280.pdf [Accessed 10 June 2010]
Groves, R.H. (Convenor), Hosking, J.R., Batianoff, G.N., Cooke, D.A., Cowie, I.D., Johnson, R.W., Keighery, G.J., Lepschi, B.J., Mitchell, A.A., Moerkerk, M., Randall, R.P., Rozefelds, A.C., Walsh N.G., and Waterhouse, B.M. 2003. Weed categories for natural and agricultural ecosystem management. Bureau of Rural Sciences, Canberra.
Summary: This document gives the status of all weed species found in Australia.
Hosking, John R.; Conn, Barry J.; Lepschi, Brendan J.; Barker, Clive H., 2008. Plant species first recognised as naturalised for New South Wales in 2002 and 2003, with additional comments on species recognised as naturalised in 2000-2001. Cunninghamia. 10(1). 2007. 139-166.
Summary: Available from: http://www.rbgsyd.nsw.gov.au/__data/assets/pdf_file/0009/85068/Cun101139Hos.pdf [Accessed 10 June 2010]
Howell Clayson J., John W.D. Sawyer 2006. New Zealand Naturalised Vascular Plant Checklist. New Zealand Plant Conservation Network, November 2006.
Summary: Available from: http://nzpcn.org.nz/publications/Naturalised-list-06-new.pdf [Accessed 10 June 2010]

Integrated Taxonomic Information System (ITIS), 2010. *Acanthus mollis* L.
Summary: Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=506051 [Accessed 10 June 2010]
Mahon D.J. 2007. Canterbury naturalised vascular plant checklist. New Zealand Department of Conservation.
Summary: Available from: http://www.doc.govt.nz/upload/documents/conservation/threats-and-impacts/weeds/canterbury-naturalised-plants.pdf [Accessed 30 August 2010]
McGuffin M., Kartesz J.J., Leung A.Y., Tucker A.O. 2000. FDA Poisonous Plant Database. In: Herbs of commerce, 2nd edition. American Products Association, 421 pp.
Summary: Available from: http://www.accessdata.fda.gov/scripts/Plantox/Detail.CFM?ID=18120 [Accessed 30 August 2010]
O Shea, E. M. and J. B. Kirkpatrick, 2000. The Impact of Suburbanization on Remnant Coastal Vegetation in Hobart, Tasmania. Applied Vegetation Science, Vol. 3, No. 2 (Dec., 2000), pp. 243-252
Rozefelds, A. C. F.; L. Cave; D. I. Morris and A. M. Buchanan, 1999. The Weed Invasion in Tasmania since 1970. Australian Journal of Botany.,1999, 47, 23&#65533;48
Stace, C., R. van der Meijden (ed.) & I. de Kort (ed.) *Acanthus mollis* Bear s-breech Interactive Flora of NW Europe
Summary: Available from: http://ip30.eti.uva.nl/bis/flora.php?selected=beschrijving&menuentry=soorten&id=3728 [Accessed 10 June 2010]
Stace C., van der Meijden R., de Kort I. undated b. *Acanthus spinosus* (Spiny bear s-breech). Flora of NW Europe.
Summary: Available from: http://ip30.eti.uva.nl/bis/flora.php?selected=beschrijving&menuentry=soorten&id=3729 [Accessed 28 June 2010]
Stearn, T. William, 1996. The Tortuous Tale of Bear s Breech , the Puzzling Bookname for *Acanthus mollis* . Garden History, Vol. 24, No. 1 (Summer, 1996), pp. 122-125
Trade Me - New Zealand online auctions and classifieds. *Acanthus mollis* for sale, New Zealand.
Summary: Seeds from sale on Trade Me - NZ. Available from: http://www.trademe.co.nz [Accessed 28 June 2010]
USDA, ARS, 2010. Taxon: *Acanthus mollis* L. National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database].
Summary: Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?100692 [Accessed 10 June 2010]
USDA-NRCS, 2010. *Acanthus mollis* L. bear s breech. The PLANTS Database (http://plants.usda.gov, 10 June 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
Summary: Available from: http://plants.usda.gov/java/profile?symbol=ACMO8 [Accessed 10 June 2010]