

GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Helix aspersa

Helix aspersa System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Mollusca	Gastropoda	Stylommatophora	Helicidae

Common name European brown snail (English), brown garden snail (English)

Synonym Cornu aspersum , Müller

Cantareus aspersus , Müller Cryptomphalus aspersus , Müller

Similar species

Summary Helix aspersa the brown garden snail, is a herbivorous land snail that is native

to the United Kingdom and western Europe. It is also native to the countries along the borders of the Mediterranean Sea and the Black Sea. It has been introduced to many places worldwide as food, by snail enthusiasts and accidentally attached to plant matter or freight. *H. aspersa* is a pest of gardens, orchards and nurseries, and is considered a serious pest in California. It is thought that *H. aspersa* may be a vector for *Phytophthora citrophthora*,

which causes cankers on the branches of clementine cultivars (*Citrus*

clementina).



view this species on IUCN Red List

Notes

Helix aspersa Müller is also referred to as Cantareus aspersus (Müller), Cryptomphalus aspersus (Müller) and Cornu aspersum (Müller).

General Impacts

Asides from being a pest in gardens, orchards and nurseries through herbivory, *H. aspersa* can also impact grassland species composition. For example, it was found that *H. aspersa* showed a preference for consuming the native grass *Bromus carinatus*, which is very rare. (Motheral & Orrock 2010).

It is also thought that *H. aspersa* may be a vector for the disease *Phytophthora citrophthora*, which causes the disease Phytophthora branch canker (PBC) in citrus in Spain. Symptoms of PBC include cankers on the branches of clementine cultivars (*Citrus clementina*). (Alvarez *et al.* 2009).

Management Info

There are multiple management techniques used for controlling *H. aspersa*. These include manual control, *e.g.* hand collection of individuals, creating barriers to restrict access to foliage; chemical control, *e.g.* carbamates, metal chelates and metaldehyde; and biological control - the predatory snail *Rumina decollata* has found to be an effective biological control agent in California. However, it has been found that molluscicides alone are not an effective method of controlling *H. aspersa*. (Barker & Watts 2002; Dekle & Fasulo 2008; Flint & Wilen 2009). For more management information, please see the <u>Integrated Pest Management page on *Helix aspersa*.</u>

Pathway

Snail hobbyists have imported this species to many parts of the world where is has subsequently become established. (Dekle & Fasulo 2008).



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Principal source:

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ALIEN RANGE

[1] ARGENTINA[1] AUSTRALIA[1] CANADA[1] CHILE[1] MEXICO[1] NEW ZEALAND[1] SOUTH AFRICA[1] UNITED STATES

BIBLIOGRAPHY

10 references found for Helix aspersa

Managment information

Barker, M. Gary & Corinne Watts, 2002. Management of the invasive alien snail *Cantareus aspersus* on conservation land, DOC Science Internal Series 31.

Summary: Available from: http://192.206.154.93/upload/documents/science-and-technical/DSIS31.pdf [Accessed 22 June 2010] Canadian Food Inspection Agency (CFIA), 2009. *Helix aspersa* (M�ller) - European Brown Garden Snail

Summary: Available from: http://www.inspection.gc.ca/english/plaveg/pestrava/helasp/tech/helaspe.shtml [Accessed 22 June 2010]
Dekle, G. W. and T. R. Fasulo, 2008. Brown Garden Snail, Helix aspersa M�ler (Gastropoda: Pulmonata: Helicidae). EENY-240 (IN396)
(originally published as DPI Entomology Circular 83), one of a series of Featured Creatures from the Entomology and Nematology
Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Published: October 2001. Revised: August 2002. Reviewed: March 2008.

Summary: Available from: http://edis.ifas.ufl.edu/pdffiles/IN/IN39600.pdf [Accessed 22 June 2010]

Flint, M. L. & C. A. Wilen, 2009. Snails and Slugs: Integrated Pest Management for Home Gardeners and Landscape Professionals. University of California Agriculture and Natural Resources Program

Summary: Available from: http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7427.html [Accessed 22 June 2010]

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.

Ministry of Agriculture and Lands, British Columbia, 2010. European Brown Garden Snail

Summary: Available from: http://www.agf.gov.bc.ca/cropprot/ebgsnail.htm [Accessed 22 June 2010]

General information

Alvarez, L. A., D. Gramaje, P. Abad-Campos and J. Garci�a-Jimenez, 2009. Role of the *Helix aspersa* snail as a vector of *Phytophthora citrophthora* causing branch cankers on clementine trees in Spain. Plant Pathology (2009) 58, 956�963

Integrated Taxonomic Information System (ITIS), 2010. *Helix aspersa* Muller, 1774

Summary: Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=77906 [Accessed 22 June 2010]

Motheral, Sara M.; Orrock, John L., 2010. Gastropod Herbivore Preference for Seedlings of Two Native and Two Exotic Grass Species. American Midland Naturalist. 163(1). JAN 2010. 106-114.

Varnham, K 2006. Non-native species in UK Overseas Territories: a review INCC Report No. 372

Summary: Available from: http://www.caymanbiodiversity.com/wp-content/uploads/2007/10/jncc372_web.pdf [Accessed 9 April 2010]