

Hedera helix [简体中文](#) [正體中文](#)

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Phaeophycophyta	Phaeophyceae	Laminariales	Alariaceae

Common name English ivy (English)

Synonym *Hedera helix* , f. *arborescens*
Hedera helix , var. *conglomerata*
Hedera helix , var. *crenata*
Hedera helix , f. *minima*
Hedera helix , var. *minima*
Hedera helix , var. *taurica*
Hedera poetarum , var. *taurica*
Hedera taurica

Similar species *Hedera helix* cvs., *Hedera colchica*

Summary *Hedera helix* is an evergreen climbing vine of the ginseng family (Araliaceae). It is an aggressive invader that threatens all vegetation levels of forested and open areas, growing along the ground as well as into the forest canopy. It is widely used as a fast-growing, low maintenance, evergreen groundcover and once established at a site, *Hedera helix* can be expected to move beyond its intended borders by vegetative means or by seed. Seeds are dispersed to new areas primarily by birds.



[view this species on IUCN Red List](#)

Species Description

Diedrich and Swearingen (2000) describe *Hedera helix* as an evergreen climbing vine in the ginseng family (Araliaceae). Leaves are dark green, waxy, somewhat leathery, and arranged alternately along the stem. *H. helix* has many recognized leaf forms. The 3-lobed leaves occur on the juvenile plant, which climbs by means of adventitious roots. After reaching a certain size (age?), and usually when it grows tall enough to get into the sun, the plant assumes its mature form, with unlobed, oval leaves. This form does not climb. The process is not reversible, and cuttings from the mature form remain mature. In fact in cultivation they can be trained into small (non-climbing) shrubs or trees (Thompson, K., pers.comm., 2004). Umbrella-like clusters of small, greenish-white flowers appear in the fall if sufficient sunlight is available. Fruits mature in spring and are black with a fleshy outer covering enclosing one to a few hard, stone-like seeds.

Lifecycle Stages

During the juvenile or non-reproductive stage, *Hedera helix* is typically a ground cover. The leaves of the adult or reproductive form are usually a lighter green, thick, ovate to rhombic in shape and have less prominent whitish veins. During the adult stage, *H. helix* produces terminal clusters of greenish-white flowers in the fall, which are pollinated by wasps, bees, and flies. The following spring *H. helix* produces a dark purple, fleshy drupe (fruit).

Uses

H. helix is widely used by homeowners, horticulturists, landscape contractors, parks departments, and others who desire a fast-growing, low maintenance, evergreen groundcover as an alternative to lawn grass (Diedrich and Swearingen, 2000).

Habitat Description

Diedrich and Swearingen (2000) state that *Hedera helix* requires temperate to subtropical climates where it infests woodlands, forest edges, fields, hedgerows, coastal areas, salt marsh edges, and other upland areas, especially where some soil moisture is present. *H. helix* will grow in variable light conditions but prefers shade, damp soils, and a moist, cool environment.

Reproduction

Diedrich and Swearingen (2000) indicates that *H. helix* reproduces vegetatively and by seed, which is dispersed to new areas primarily by birds. New plants grow easily from cuttings or from stems making contact with the soil.

General Impacts

According to Diedrich and Swearingen (2000), *Hedera helix* is an aggressive invader that threatens all vegetation levels of forested and open areas, growing along the ground as well as into the forest canopy. The impacts of *H. helix* include decrease in native vegetation and loss of biodiversity. The dense growth and abundant leaves, which spring from the stems like small umbrellas, form a thick canopy just above the ground and prevent sunlight from reaching other plants.

Vines climbing up tree trunks spread, surround and cover branches and twigs, preventing most of the sunlight from reaching the leaves of the host tree thus reducing photosynthesis. It cover meristems, and thus disrupt the tree's growth, first on branch tips and eventually at the tree top. The impacts on photosynthesis and growth may well produce parallel damage to the root system, since the tree can no longer provide the level of nutrition to the roots (David L. Morgan in Aliens-L January 28 2005). Loss of host tree vigor, evident within a few years, is followed by death a few years later. The added weight of vines makes infested trees susceptible to blow-over during storms.

Management Info

Integrated management: According to Diedrich and Swearingen (2000), several effective methods of control are available for *H. helix*, including chemical and non-chemical, depending on the extent of the infestation, the amount of native vegetation on-site, and available time and labor. Vines growing as groundcover can be pulled up by hand, with some difficulty, and left on-site or bagged and disposed of as trash. Vines climbing up into the tree canopy are more difficult to manage. First, vines should be cut at a comfortable height to kill upper portions and relieve the tree canopy. Because *H. helix* is an evergreen vine and remains active during the winter, herbicide applications can be made to it any time of year as long as temperatures are above 12 or 15 degrees Celsius for a few days. The systemic herbicide triclopyr (e.g., Garlon) is absorbed into plant tissues and carried to the roots, effectively killing the entire plant in place. Repeat herbicidal treatments are likely to be needed and follow-up monitoring should be conducted to evaluate the success of treatments.

Pathway

H. helix has been used extensively in many parts of the United States as an ornamental landscape plant (Okerman, UNDATED).

Principal source: [English Ivy \(Diedrich and Swearingen, 2000\)](#)

Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

Review: Dr Ken Thompson Department of Animal and Plant Sciences The University Sheffield UK.

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ALIEN RANGE

[1] AUSTRALIA

[1] BRAZIL

[1] GEORGIA

[28] UNITED STATES

[1] BERMUDA

[2] CANADA

[3] NEW ZEALAND

BIBLIOGRAPHY

12 references found for *Hedera helix*

Management information

[Murray, C. and C. Pinkham. 2002. Towards a Decision Support Tool to Address Invasive Species in Garry Oak & Associated Ecosystems in BC. Prepared by ESSA Technologies Ltd., Victoria, B.C. for the GOERT Invasive Species Steering Committee, Victoria, 96 pp.](#)

Summary: Available from: <http://www.goert.ca/documents/GOEDSTreport.pdf> [Accessed 13 February 2008]

[Okerman, A. UNDATED. Combating the Ivy Desert: The Invasion of Hedera helix \(English Ivy\) in the Pacific Northwest United States Restoration and Reclamation Review.](#)

Summary: A detailed report on the biology, ecology and management of *H. helix*.

[The Garry Oak Ecosystems Recovery Team \(GOERT\)., 2003. Annotated Bibliographies on the Ecology and Management of Hedera helix](#)

Summary: Available from: http://www.goert.ca/documents/Bib_hedeheli.pdf [Accessed 13 February 2008]

[The Garry Oak Ecosystems Recovery Team \(GOERT\)., 2003. Field manual of Hedera helix](#)

Summary: Available from: http://www.goert.ca/documents/InvFS_hedeheli.pdf [Accessed 13 February 2008]

[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.

Available from: <http://www.jncc.gov.uk/page-3660> [Accessed 10 November 2009]

[Wotherspoon and Wotherspoon, 2002. The evolution and execution of a plan for invasive weed eradication and control, Rangitoto Island, Hauraki Gulf, New Zealand. In Turning the tide: the eradication of invasive species: 381-388. Veitch, C.R. and Clout, M.N.\(eds\). IUCN SSC Invasive Species Specialist Group. IUCN. Gland, Switzerland and Cambridge, UK.](#)

Summary: Eradication case study in Turning the tide: the eradication of invasive species.

General information

[Diedrich, S., Swearingen, J. 2000. English Ivy U.S. National Park Service.](#)

Summary: A report on all aspects of *H. helix*.

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database Hedera helix](#)

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.cbif.gc.ca/pls/itisc/taxastep?king=every&p_action=containing&taxa=Hedera+helix&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]

[Metcalf, D. J., 2005. Hedera helix L. Journal of Ecology Volume 93 Issue 3 Page 632 - June 2005](#)

[Ness, C. 1989. English Ivy Virginia Cooperative Extension.](#)

Summary: A fact sheet that contains information on *H. helix*, including related species.

[USDA-ARS \(United States Department of Agriculture, Agricultural Research Service\). UNDATED. Taxon: Hedera helix L. National Genetic Resources Program. Germplasm Resources Information Network \(GRIN\). \[Online Database\] National Germplasm Resources Laboratory, Beltsville, Maryland.](#)

Summary: An online database that contains information and links on the species *H. helix*.

Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl?Hedera+helix [Accessed November 2005]

[USDA-NRCS \(Natural Resource Conservation Service\). 2005. Hedera helix. The PLANTS Database Version 3.5 \[Online Database\] National Plant Data Center, Baton Rouge, LA.](#)

Summary: Available from: <http://plants.usda.gov/java/profile?symbol=HEHE> [Accessed 12 March 2006].