GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Hedera helix***

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\r\nto 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 above12 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)

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ALIEN RANGE

[1] AUSTRALIA
[1] BRAZIL
[1] GEORGIA
[28] UNITED STATES
[1] BERMUDA
[2] CANADA
[3] NEW ZEALAND

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Managment information

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General information

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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:
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