

TunyaLee Morisawa
The Nature Conservancy
Wildland Weeds Management and Research
<http://tncweeds.ucdavis.edu>
30 June 1999

Introduction:

Hedera helix L. is commonly called English ivy. *H. helix* belongs to the family Araliaceae (ginseng) and is a native of Europe. Brought to North America by colonial settlers, *H. helix* has become naturalized in the US. English ivy is cultivated in Europe and North America in gardens, landscapes and as house plants. This plant grows easily in many types of soil and in sun or shade. English ivy is fairly drought tolerant once it is established. Leaves are alternate and simple with the juvenile leaves 3-5 lobed and adult leaves ovate to rhombic. Mature plants will bear greenish-white flowers. The fruit is berry-like and black.

Poultices for cuts and sores are made from the leaves. However, an allergic reaction can occur in sensitive people. Secondary compounds within the leaves may be natural product pesticides for insects and mollusks.

English ivy outcompetes both grasses, herbs and trees, often reducing animal feeding habitats. In warm areas, *H. helix* can grow throughout the year and probably outcompetes native vegetation that is dormant during the winter. In Australia, English ivy is found in disturbed areas of the forest. Seeds are often spread into these areas by birds or other animals. *H. helix* is a pest in Europe but only in disturbed habitats.

Cultural Control:

Cutting is successful with persistence but does not always kill the plant. However, the use of cutting and then applying a herbicide may provide better control (see Chemical control section).

Using a shovel to remove plants provided immediate control with little regrowth. Weeding plants by hand or with pliers successfully allowed regeneration of most native species in Australia. Do not leave the pulled plants on the ground; they can continue to grow. If removal of the plants is not possible, place the pulled plants on a wooden platform to dry and decompose.

Immediately control English ivy that is growing up trees by cutting the vine at waist height, loosening the vine around the limbs and removing the roots. If the root can not be removed by hand, strip the bark and notch the exposed section of the vine. Paint on an undiluted herbicide such as glyphosate. If English ivy is growing on tree-ferns, take care that all pieces of the ivy are removed. The growth of *H. helix* can be sustained by the fibrous nature of the trunk.

Chemical Control:

A wax layer on the leaves often prevents herbicides, especially hydrophilic compounds such as glyphosate, from permeating the leaves.

In container pots, two applications, one month apart, of 2,4-D (Weedar 64) applied at 1.1 kg/ha (1.0 lb/A) provided control of English ivy. Two applications of glyphosate (Roundup) applied at 4.5 kg/ha (4.0 lb/A) effectively inhibited regrowth and provided some control. Regrowth but reduced shoot weight was observed with one treatment of 2,4-D and glyphosate at the rates stated above. The same observation was noted for one or two applications of glyphosate applied at a lower rate of 2.2 kg/ha (2.0 lb/A). Regrowth occurred with plants sprayed with one or two applications of Dicamba (Banvel) or triclopyr (Garlon) at the rate of 0.6 kg/ha (0.5 lb/A).

In another study, an application of glyphosate (25% solution) provided good control. Cutting (using a nylon cord weedeater to cut to the stem surface just before treatment) followed by a 25% solution of glyphosate also provided control of English ivy. Excellent control of *H. helix* that had been cut and then sprayed was achieved with a 2% solution of 2,4-D. A lower rate of glyphosate (2% solution) and cutting provided only slight control. Glyphosate only (2% solution) did not control English ivy. The herbicide triclopyr or mowing provided no control. Control evaluations were made 1 year post-treatment.

References:

1. Derr, J.F. 1993. English Ivy (*Hedera helix*) Response to Postemergence Herbicides. *Journal of Environmental Horticulture* 11(2):45-48.
2. Elmore, C.L., W.D. Hamilton and L.R. Coatello. 1986. Control of ornamentals gone wild: pampas grass, bamboo, english and algerian ivy. *Proceedings 38th Annual California Weed Conference* pp.163 and 166.
3. Freshwater, V. 1991. Control of English ivy (*Hedera helix*) in Sherbrooke forest - a practical experience. *Plant Protection Quarterly* 6(3):127.
4. Thomas, L.K. Impact of Three Exotic Plant Species on a Potamac Island. *Scientific Monograph # 13 Series US Department of the Interior.*
5. TNC Wildland Weeds Management and Research Weed Report. 1995
6. Viougeas, M.A., R. Rohr and A. Chamel. 1995. Structural changes and permeability of ivy (*Hedera helix* L.) leaf cuticles in relation to leaf development and after selective chemical treatments. *New. Phytol.* 130:337-348.