Common Name: English Ivy

Scientific Name: *Hedera helix* L.

English ivy, a member of the Araliaceae or Ginseng family, is an evergreen perennial vine. This plant continues to be a popular ornamental and has been developed into hundreds of varieties. In many natural areas throughout the United States it is known for creating "Ivy Deserts". These areas are often devoid of native herbaceous plants with trees trunks being covered with dense green ivy. When used as a solution for soil erosion, English ivy is a particularly poor choice. It does not form an extensive underground root system as it covers areas to the exclusion of other plants. As a result, surface flow easily undermines the soil on steep slopes.

**Height:** Since English Ivy is a climbing vine; it will grow as tall as its supporting structures allow.

**Leaves:** The commonly found juvenile leaves are palmate with three to five lobes with heart-shaped leaf bases. They grow to 11 cm long and 10 cm wide, dark green in color and have a thick waxy cuticle. Some leaf shape variation is seen, most notably when the plant is flowering.

**Flowers:** Greenish-yellow perfect flowers form a terminal umbel. These clusters can be solitary or racemose. Fall flowering is dependent on exposure to sunlight.

**Fruit:** The fruit is black and 7 to 8 mm in diameter.

**Life History**

English ivy is evergreen, very tolerant of shade and will grow in full sun. English ivy has two distinct life phases, juvenile and adult. In the juvenile stage English ivy is a climbing and creeping vine. As the vines climb, rootlets sprout from the leaf nodes thereby firmly attaching the plant to available vertical structures. It does not strangle the host plants, as do some other non-native climbing vines. The rootlets do not penetrate the bark of trees and are not considered parasitic. In the adult or reproductive phase, *E. ivy* produces a woody erect stem either from the ground or off of existing climbing vines. Leaves of adult plant differ from the juvenile plants by having lighter green leaves, and an ovate to rhombic shape. In order to flower English ivy requires a greater amount of sunlight. Birds eat the berries, although in small amounts due to their mild toxicity. The seeds need to be scarified in order to germinate.
Origin and Distribution

English ivy is native to Europe and was brought to the U.S. by early settlers as an ornamental. Since that time, its popularity as a landscape plant has continued. Its use as a roadside beautification and erosion control planting has augmented further spread. E. ivy is present in twenty-eight states including Hawaii.

Similar Species

English ivy is quite unique, but may be confused with other native climbing vines such as wild grape (Vitis sp.), Dutchman’s pipe vine (Aristolochia macropetala), or the non-native cinnamon vine (Dioscorea oppositifolia). H. helix can be distinguished by its palmate leaves, dark green color, thick cuticle, and evergreen character.

Habitat

English ivy prefers moist, successional deciduous woods. However, it will grow on a variety of exposures, moisture regimes, soil types, and slopes. This plant will not flower under dense shade but will persist and continue to spread.

Management Recommendations

Mechanical Control

Cutting: Cut climbing or trailing vines as close to the root collar as possible. This technique is feasible on small populations, as a pretreatment on large impenetrable sites, in areas where herbicide cannot be used, or if labor resources are not sufficient to adequately implement herbicidal control. Severed vines may continue to live on tree bark or other porous surfaces for several growing seasons. English ivy will resprout unless cut so frequently that its root stores are exhausted.

Grubbing: This method is appropriate for small initial populations or environmentally sensitive areas where herbicides cannot be used. Using a pulaski or similar digging tool, remove the entire plant, including all roots and runners. Juvenile plants can be hand pulled depending on soil conditions and root development. Any portions of the root system not removed will potentially resprout.

Mulching: Mulching is an effective control on small infestations or in areas where herbicides cannot be used. Cover the entire infestation with several inches of mulch. This may include wood chips, grass clippings, hay or similar degradable plant material. Shredded or chipped wood may be the best option since hay and grass may potentially carry weed seeds. Covering the area with cardboard may improve the effectiveness and longevity of this method. The mulch should stay in place for at least two growing seasons and may need to be augmented several times.

Herbicidal Control

Stump Treatment: Use this method in areas where vines are established within or around non-target plants, or where vines have grown into the canopy.

Glyphosate: Cut the stem 5 cm (2 in) above ground level. Immediately apply a 25% solution of glyphosate and water to the cross-section of the stem. This procedure is effective at low temperatures (as low as 40°F) and may require a subsequent foliar application of glyphosate.

Triclopyr: Cut the stem 5 cm (2 in) above ground level. Immediately apply a 25% solution of triclopyr and water to the cross-section of the stem. This procedure remains effective at low temperatures.
(<60°F) as long as the ground is not frozen. A subsequent foliar application may be necessary to control new seedlings.

**Foliar Spray Method:** Use this method to control large populations. It may be necessary to precede foliar applications with stump treatments to reduce the risk of damaging non-target species. Since English ivy is evergreen, the ideal time to spray is after surrounding vegetation has become dormant to avoid affecting non-target species.

**Glyphosate:** Apply a 4% solution of glyphosate and water plus 0.5%-1% non-ionic surfactant to thoroughly wet all foliage. Do not apply so heavily that herbicide will drip off leaves. Glyphosate is a non-selective systemic herbicide that may kill non-target partially sprayed plants. Ambient air temperature should be above 65°F.

**Triclopyr:** If native grasses are intermingled with the ivy, triclopyr is preferred since it is selective to broadleaved plants. Apply a 2% solution of triclopyr and water to thoroughly wet all foliage. Do not apply so heavily that herbicide will drip off leaves. A 0.5% non-ionic surfactant is recommended in order to penetrate the leaf cuticle, and ambient air temperature should be above 65°F.

**Bibliography**

American Ivy Society Nov. 10 2002 <http://www.ivy.org/ >


