

Scientific Name: *Hedera helix*

Common Name: English Ivy

Updated: 5/5/2016

A. Priority: D

A. Description – *Hedera helix* is native to Europe and was probably brought to the United States by early settlers for use as an ornamental vine. The appealing, dark green, glossy leaves of this plant continue to make it a popular, low maintenance, evergreen groundcover. It is now found throughout eastern and southern states and is posing particularly damaging ecological impacts in Oregon and Washington. *Hedera helix* is an interesting plant in that it has two distinct leaf shapes depending on its age and exposure to sun. As a groundcover, the leaves have three to five lobes (the most common). Mature plants in full sun that are ready to flower often have un-lobed, oval leaves. English ivy is an evergreen climbing vine that attaches to the bark of trees, brickwork, and other surfaces by way of small root-like structures which exude a sticky substance that helps the vines adhere to various surfaces. Older vines have been reported to reach 1 foot in diameter. Leaves are dark green with white veins, waxy to somewhat leathery, and arranged alternately along the stem. Leaf forms include a 3 to 5-lobed leaf (the most common) and an un-lobed rounded leaf often found on mature plants in full sun that are ready to flower. Vines may grow for up to ten years before producing flowers. Under sufficient light conditions, terminal clusters of small, pale yellow-green flowers are produced in the fall. The flowers are attractive to flies and bees in search of late season nectar sources. The black-purple fruits have a thin fleshy outer covering, contain one to three hard, stone-like seeds and may persist through the winter if not eaten first.

B. Damage and threats – English ivy is a vigorous growing vine that impacts all levels of disturbed and undisturbed forested areas, growing both as a ground cover and a climbing vine. As the ivy climbs in search of increased light, it engulfs and kills branches by blocking light from reaching the host tree's leaves. Branch dieback proceeds from the lower to upper branches, often leaving the tree with just a small green "broccoli head". The host tree eventually succumbs entirely from this insidious and steady weakening. In addition, the added weight of the vines makes infested trees much more susceptible to blow-over during high rain and wind events and heavy snowfalls. Trees heavily draped with ivy can be hazardous if near roads, walkways, homes and other peopled areas. On the ground, English ivy forms dense and extensive monocultures that exclude native plants. English ivy also serves as a reservoir for Bacterial Leaf Scorch (*Xylella fastidiosa*), a plant pathogen that is harmful to elms, oaks, maples and other native plants.

C. Management Options

Mechanical Control: Vines growing as groundcover can be pulled up by hand, with some difficulty, and left on-site or bagged and disposed of as trash. For climbing vines, first cut the vines near the ground at a comfortable height to kill upper portions and relieve the tree canopy. A large screw driver or forked garden tool can be used to pry and snap the vines away from the tree trunks. Vines can be cut using a hand axe or pruning saw for larger

vines or a pruning snips for smaller stems. Try to minimize damage to the bark of the host tree. Rooted portions will remain alive and should be pulled, repeatedly cut to the ground or treated with herbicide. Cutting will likely result in vigorous regrowth, vigilance is required to ensure long term control.

Chemical Control: Use of a systematic herbicide is the best option to control English Ivy. We recommend using aquatic formulations of herbicides in this region to limit potentially unwanted effects to the surrounding environment. More details provided in the management techniques below.

- a. **Foliar Spray** – This method involves spraying a dilute herbicide directly onto the plants leaves. Application needs to occur when foliage is present, sometime between full leaf and the onset of fall for full effectiveness. Caution should be taken when applying herbicide with this method as non-target plants can easily be killed by drift or overspray. Application should cover at least 80% of the leaves.
To treat English Ivy, use a 2-4% solution of aquatic triclopyr in water with a 0.5% non-ionic surfactant and apply directly to leaves until just before runoff. Air temperatures must be above 65 degrees and winds should be lower than 5 mph.
- b. **Cut Stump** – This method involves cutting the vine as close to $\frac{3}{4}$ of an inch from the ground as possible (no more than 5in.) and immediately applying a systematic herbicide. If the vine is climbing cut it again 2-3 feet up so there is a large gap between the vines on the tree and those on the ground. It is best to use this method between summer and fall, but it may be used as long as the ground is not frozen. To treat using this method, apply a 50% formulation of aquatic glyphosate or triclopyr directly to the cut stump.

D. Recommended Management Strategy

- a. We recommend treating this species by first utilizing a cut stump technique as described above to cut and treat all climbing vines around trees, walls, etc. After this initial treatment, all ground level plants should be treated via foliar spray. This is best conducted on monoculture infestations.
- b. In areas where a risk to non-target vegetation is present, wait until a warm day (temperature above 50 degrees) during the dormant season and foliar spray all vegetation.
- c. Repeated treatments will need to occur over several years to ensure control.

E. Additional and Updated Information

For additional information including photographs and the most up to date control recommendations please visit www.wachng.org/Plants.