



Winter Creeper, Climbing Euonymus

Euonymus fortunei (Turcs.) Hand.-Mazz.

Native Range: Asia (China) in 1907 introduced for ornamental ground covering.

Common Names: Climbing euonymus, winter creeper, Emerald'n Gold, and Gaiety

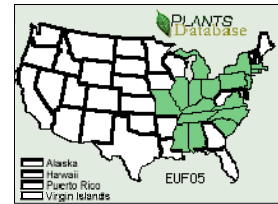


Description: Evergreen, woody, clinging vine in the staff-tree (Celastraceae) family. It can form a dense groundcover or shrub to 3 feet in height, or climb 40-70 foot high vertical surfaces with the aid of aerial roots. Dark green or green-white variegated, thick, egg-shaped leaves, from 1 - 2 1/2 inches long, with toothed margins and silvery veins, occur in pairs along the stems. Stems are narrow, warty, and have rootlets or trailing roots. Clusters of green-white flowers are produced on long stalks from June to July and are followed in the autumn by pinkish to red capsules that split open to expose seeds adorned with a fleshy orange seed coat, or aril. It spreads vegetatively with the help of lateral shoots produced along its long main branches and by new plants that emerge from rootlets also produced along the stem at short intervals.



Habitat: It tolerates a variety of environmental conditions, including poor soils, full sun to dense shade, and a wide pH range. It does not do well in heavy wet soils. Natural forest openings resulting from wind throw, insect defoliation or fire are vulnerable to invasion and provide conditions for satellite populations of climbing euonymus to get started. Climbing euonymus has been widely planted in gardens, from whence it spreads into adjoining forests. It often persists at abandoned home sites.

Distribution Map: It can be found in eastern and Midwestern states.



Ecological Threat: Traits that make climbing euonymus a desirable ornamental plant, such as its rapid growth, evergreen nature and tolerance of harsh conditions, also make euonymus a threat to natural areas. It has escaped from neglected gardens and is carried by water, to undisturbed forest and riparian areas. Climbing euonymus can out-compete native vegetation by depleting soil moisture and nutrients, blocking sunlight, and by forming a dense vegetative mat that impedes the growth of seedlings of native species. Vines on trees can interfere with photosynthesis.

Control and Management:

- **Manual-** Grubbing is effective for small populations or environmentally sensitive areas. Using a Pulaski or similar digging tool, remove the entire plant, including all roots and runners. Juvenile plants can be hand-pulled when the soil is moist and root systems are small. Any portions of the root system remaining may re-sprout. All plant parts including stem fragments and mature fruits should be bagged and disposed of to prevent reestablishment.
- **Chemical-** Wet all leaves thoroughly (until runoff) with one of the following herbicides in water with a surfactant (July to October for successive years): Repeatedly apply triclopyr ester or a glyphosate herbicide as a 4-percent solution in water with a surfactant, a less effective treatment that has no soil activity to damage surrounding plants. Good success reported after early spring cutting and spraying the new growth. Use a string trimmer to reduce growth layers and injure leaves for improved herbicide uptake. Follow state and label directions.

References: www.nps.gov/plants/alien/fact/eufo1.htm, <http://plants.usda.gov>, www.issg.org/database/species/ecology.asp?si=575&fr=18sts=, www.srs.fs.usda.gov/pubs/viewpub.jsp?index=5424 Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and Control, Miller, James H. 2003. p. 79-80.