

Leafy spurge
Euphorbia esula L.
Spurge Family (Euphorbiaceae)

DESCRIPTION

Habit - Leafy spurge is a long-lived, herbaceous perennial with white, milky sap. Its erect, sparingly branched stems are 2—3.5 feet tall and frequently occur in clusters from the root crown. Strong horizontal rhizomes are also present. The numerous leaves are linear-ovate, entire, and arranged alternately on the stem. Leafy spurge is somewhat similar to cypress spurge (*Euphorbia cyparissias*), but larger and coarser. The stems of cypress spurge are rarely more than 1 foot tall and the leaves are linear.

Flowers, fruits and seeds – Flowers occur in an umbel at the tip of the stem; flowering takes place May through July. Each greenish-yellow flower-like cluster actually contains several very reduced male flowers and a single female flower surrounded by 4 or 5 crescent-shaped glands. The fruit is a 3-lobed capsule containing several seeds. Seed dispersal occurs in August when the capsules burst open explosively; ejecting the seeds for a distance of 1—8 feet. The seeds also float.

DISTRIBUTION AND HABITAT

Leafy spurge is native southern Europe and into temperate Asia. It is believed to have been accidentally introduced to the United States as a seed impurity in the 1800s. It has spread through the northern prairie and plains states due to its tolerance for dry, disturbed soils. Habitats include prairies, savannas, pastures, abandoned fields, and roadsides.

EFFECTS OF INVASION

Leafy spurge is especially aggressive in dry, open sites where the competition is reduced. It could be especially damaging in grassland habitats. The plants begin to grow very early in the spring and can crowd out other species.

REPRODUCTION AND DISTRIBUTION

Leafy spurge is a prolific seed producer; vegetative spread via rhizomes is also effective, especially in light-textured soils.



CONTROL

Mechanical – Mechanical control of leafy spurge is difficult due to the widely spreading roots and rhizomes. Repeated mowing or hand-cutting can prevent seed formation, but root stocks will persist.

Chemical – Chemical control using glyphosate or 2, 4-D is recommended. Proper timing is essential for maximum effectiveness. Glyphosate is most effective when applied after seed set in mid summer or in late September after fall regrowth has started.

Biological – No biological controls are currently available, however research is underway.

References

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Tutin, T.G., V.H. Heywood, N.A. Burges, D.M. Moore, D.H. Valentine, S.M. Walters, and D.A. Webb. 1986. *Flora Europaea* Vol. 2. Cambridge University Press, Cambridge, UK.

USDA Plants Database

<http://plants.usda.gov/java/nameSearch?keywordquery=Euphorbia+esula&mode=sciname&submit.x=10&submit.y=8>, accessed 11/29/2011.

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