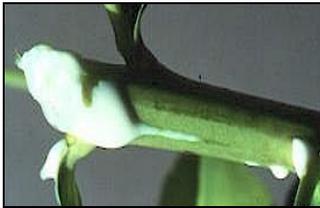


# Leafy Spurge

(*Euphorbia esula*)



New growth



The milky sap has toxic properties

**Important:** When using herbicides, do not just treat the Leafy spurge plants, spray an extra 10 to 15 feet around each patch to control any spreading roots and seedlings.



The yellow-green, heart-shaped bracts at the base of the flowers give Leafy Spurge its distinctive color through the summer.



Read and follow all label instructions when applying herbicides.

Leafy spurge is a perennial weed that typically grows 1 to 3 feet tall with a single, erect stem that may branch near the top. The long narrow leaves are about ¼ inch wide and 1 to 3 inches long. Upper leaves are crowded, lower leaves are alternate on the stem. From late May to July, inconspicuous flowers without petals develop on the tips of short terminal branches. More noticeable than the flowers are the broad, heart-shaped bracts that occur opposite each other near the base of the flowers. The bracts turn yellow as the plants approach maturity and commonly are mistaken for yellow flowers.

Leafy spurge spreads by seeds and roots. As the chambers of the seed capsule ripen, unequal pressures cause the capsule to explode, throwing the seeds as far as 20 feet. Mature plants have extensive root systems that may extend 15 or more feet into the soil and many have horizontal roots that enable the colony to enlarge by underground growth.

Leafy spurge contains the alkaloid euphorbon, which is toxic to humans and animals and is a known co-carcinogen. The plant's white, latex sap seriously irritates the skin of people and animals and can cause human blindness upon eye contact. The root sap gives off a substance that inhibits the growth of grasses and surrounding plants. Cattle tend to avoid Leafy spurge, but sheep and goats learn to favor it and with appropriate attention, will thrive on it.

Leafy spurge increases where cattle graze because they prefer grass and thus remove the spurge's competition. Where grazing continues, spurge will eventually dominate. Sheep and goats eat leafy spurge, but must be removed as soon as they consume the spurge to avoid overgrazing the grass. When livestock graze Leafy spurge after it has begun to flower, they can spread the seed to uninfested areas.

Because of its extensive root system, Leafy spurge is extremely difficult to control. Therefore, prevention of new infestations is critical. Do not allow any Leafy spurge plant to go to seed. Persistence is the key, many Leafy spurge control efforts have failed because treatments were not applied in a timely manner or skipped for one or more years.

**Control Measures:** Cultivation prevents seed production, but will create root fragments that can spread the infestation. Mowing will also prevent seed production, but will not kill the plant or prevent its spread and careful attention needs to be paid to the milky sap that exudes from the plant when cut.

There are biological control agents that have provided some control over a long period of time. These are only recommended on large infestations and must be used in conjunction with other control methods. It is important to keep plants from going to seed along roads or near neighboring properties. Biological controls take several years to make an impact and should not be relied upon as the only method of control.

For effective, long-term control of Leafy spurge, establishing competitive vegetation with perennial grasses, along with the use of selective herbicides is the recommended management tool for containing and preventing the spread of existing infestation and for eradication of new infestations.

Recommended herbicides include 2,4-D, Dicamba or a combination of the two. Good results have been documented with the use of Plateau in the fall, however this product needs to be used at a high rate and can injure grass. Be sure to use a surfactant along with the herbicide when spraying Leafy spurge to improve the quality of control.

Picloram with 2,4-D historically has been the most effective herbicide control for Leafy spurge. This can be applied at any point during the growing season, with good results in the spring when sprayed while the spurge is actively growing; during the true flower growth stage in mid-June and on fall regrowth.