

# Purple Loosestrife

*Lythrum salicaria* L.

**NATIVE RANGE:** Eurasia- Great Britain, central and southern Europe, central Russia, Japan, Manchuria China, southeast Asia and northern India

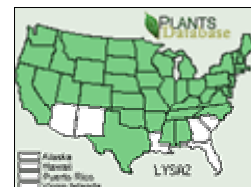
**DESCRIPTION:** Purple loosestrife is an erect perennial herb in the loosestrife family (Lythraceae), with a square, woody stem and opposite or whorled leaves. Leaves are lance-shaped, stalkless, and heart-shaped or rounded at the base. Plants are usually covered by a downy pubescence. Loosestrife plants grow from four to ten feet high, depending upon conditions, and produce a showy display of magenta-colored flower spikes throughout the summer (June to September). Flowers have five to seven petals. Mature plants can have from 30 to 50 stems that are capable of producing an estimated two to three million seeds per year from a single rootstock. It spreads through the vast number of seeds dispersed by wind and water, and vegetatively through underground stems at a rate of about one foot per year.



**ECOLOGICAL THREAT:** Purple loosestrife adapts to natural and disturbed wetlands. As it establishes and expands, it can out-compete and replace native grasses, sedges, and other flowering plants that provide a higher quality source of nutrition for wildlife. The highly invasive nature of purple loosestrife allows it to form dense, homogeneous stands that restrict native wetland plant species, including some federally endangered orchids, and reduce habitat for waterfowl.

**HABITAT IN THE UNITED STATES:** Purple loosestrife is capable of invading wetlands such as freshwater wet meadows, tidal and non-tidal marshes, river and stream banks, pond edges, reservoirs, and ditches.

**U.S. DISTRIBUTION:** Purple loosestrife is on State Noxious Weed Lists for 43 States



**CONTROL AND MANAGEMENT:** Manual- Small infestations of young purple loosestrife plants may be pulled by hand, preferably before seed set.

Chemical- For older plants, spot treating with a glyphosate type herbicide (e.g., Rodeo for wetlands, Roundup for uplands) is recommended. These herbicides may be most effective when applied late in the season when plants are preparing for dormancy. However, it may be best to do a mid-summer and a late season treatment, to reduce the amount of seed produced.

Biological control - For long term control of large infestations biological control is recommended. As of 1997, three insect species from Europe have been approved by the USDA for use as biological control agents. These plant-eating insects include a root-mining weevil (*Hylobius transversovittatus*), and two leaf-feeding beetles (*Galerucella californiensis* and *Galerucella pusilla*). Two flower-feeding beetles (*Nanophyes*) that feed on various parts of purple loosestrife plants are still under investigation. *Galerucella* and *Hylobius* have been released experimentally in natural areas in 16 northern states, from Oregon to New York. Although these beetles have been observed occasionally feeding on native plant species, their potential impact to non-target species is considered to be low.

**References:** [www.nps.gov/plants/alien/fact/lysa1.htm](http://www.nps.gov/plants/alien/fact/lysa1.htm), <http://plants.usda.gov>, Plant Invaders of Mid-Atlantic Natural Areas, National Park Service & US Fish & Wildlife Service, p. 26-27