

# U.S. National Early Detection and Rapid Response System for Invasive Plants

## EDRR Fact Sheet

Randy G. Westbrooks, U.S. Geological Survey. Whiteville, North Carolina. USA.

**Common Name:** Purple Loosestrife

**Scientific Name:** *Lythrum salicaria* L.

**Family:** Lythraceae

**Description:** An herbaceous, perennial plant with separate stems that grow from a single woody root mass that forms clonal colonies.

**Stems** reddish-purple, square in cross section, erect in stature, up to 5' tall. **Leaves** lanceolate, 2-5" long, narrow, with a heart-shaped or rounded based, sessile, downy, arranged opposite or in whorls of three, turning bright red in the fall.

**Flowers** reddish-purple, 0.4-0.8" in diameter, with 6 petals and 12 stamens, flowering throughout the summer. **Fruit** a capsule, 0.12-0.16" long, with numerous minute seeds. A mature plant may have 30-50 flowering stems which are capable of producing 2-3 million seeds per year.

**Habitat:** Purple loosestrife invades freshwater wet meadows, tidal and non-tidal marshes, river and stream banks, pond edges, reservoirs, and ditches.

**Native Range:** Europe and Asia.

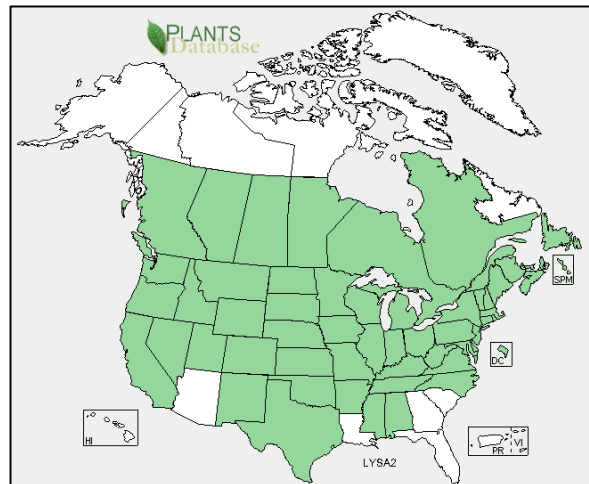
### Pathways of Introduction and Spread:

Purple loosestrife was introduced to the northeastern U.S. and Canada in the 1800s, for ornamental and medicinal uses. It is still widely sold as an ornamental, except in states where its sale and distribution is prohibited.

### U.S. and Canada Distribution:

**Ecological and Economic Impacts:** Once it becomes established on a site, Purple loosestrife degrades wildlife habitat by outcompetes and replaces native flowering plants, grasses, and sedges. Dense stands of the plant also crowd out native wetland species and reduce habitat for waterfowl.

From an economic standpoint, purple loosestrife reduces palatability of hay, reduces water flow in irrigation systems in the western U.S., and reduces waterfowl viewing and hunting opportunities.



**Physical and Manual Control:** Small infestations of young plants may be hand pulled, well before seed set. Removal of the roots is important in preventing the plant from resprouting.

**Chemical Control:** Small infestations of older plants should be chemically treated late in the growing season before seed set with a contact herbicide such as glyphosate (e.g., Rodeo for wetlands or Roundup for uplands).

**Biological Control:** The best approach for management of large infestations of purple loosestrife is through biological control. Three insects from Europe that have been approved by the USDA for use as biological control agents on Purple loosestrife include a root-mining weevil (*[Hylobius transversovittatus](#)*), and two leaf-feeding beetles (*[Galerucella californiensis](#)* and *[Galerucella pusilla](#)*).

**Regulatory Status:** Purple loosestrife is regulated as a state noxious weed in [Alabama](#), [Arizona](#), [Arkansas](#), [California](#), [Colorado](#), [Connecticut](#), [Florida](#), [Idaho](#), [Indiana](#), [Iowa](#), [Massachusetts](#), [Michigan](#), [Minnesota](#), [Missouri](#), [Montana](#), [Nebraska](#), [Nevada](#), [New Mexico](#), [North Carolina](#), [North Dakota](#), [Ohio](#), [Oregon](#), [Pennsylvania](#), [South Carolina](#), [South Dakota](#), [Tennessee](#), [Texas](#), [Utah](#), [Vermont](#), [Virginia](#), [Washington](#), [Wisconsin](#), and [Wyoming](#).

**Native Alternatives:** [Blazing Star \[\*Liatris spicata\* \(L.\) Willd.\]](#).

#### **Online Resources:**

Biological Control of Purple Loosestrife – Bernd Blossey. In Van Driesche, R. et al., 2002.  
URL: <http://www.invasive.org/eastern/biocontrol/11PurpleLoosestrife.html>

Biology and Biological Control of Purple Loosestrife – U-GA Bugwood Network.  
URL: <http://www.invasive.org/weeds/loosestrife/>

Purple Loosestrife Images - U-GA Bugwood Image Gallery.  
URL: <http://www.invasive.org/species/subject.cfm?sub=3047>

Purple Loosestrife Profile – ISSG Global Invasive Species Database.  
URL: <http://www.issg.org/database/species/ecology.asp?fr=1&si=93>

Purple Loosestrife Profile - USDA Plants Database.  
URL: <http://plants.usda.gov/java/profile?symbol=LYSA2>