Lythrum salicaria
(Purple loosestrife)

Common Name(s)
Purple loosestrife

Full Scientific Name
Lythrum salicaria L.

Family Name Common
Loosestrife family

Family Scientific Name
Lythraceae

Images
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Inflorescence
Inflorescence
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**NOMENCLATURE/SYNONYMS**

**Synonyms:** None

**DESCRIPTION**

**Botanical Glossary**

*Lythrum salicaria* is an herbaceous wetland perennial that can grow 0.5-1.5 m (1.5-5 ft.) tall. The leaves are either opposite or in whorls of three. They can be pubescent or glabrous. They are lanceolate to linear in shape and 3-10 cm (1-4 in.) long. The larger leaves can be cordate or clasping at their bases.

The flowers are purple, magenta or pink. They are numerous and borne on spikes that are between 10 and 40 cm (4-16 in.) long. The hypanthium is linear and twice as long as the sepals. Each flower has 5-7 petals, and the open flowers measure 7-12 mm (0.3-0.5 in.) in diameter. The relative lengths of styles and stamen in these flowers can vary in three different ways. The flowers are in bloom from July to September. The fruits are capsules, each containing numerous reddish-brown seeds.

**Page References** Bailey 719, Crow & Hellquist 203, Fernald 1048, Gleason & Cronquist 311, Holmgren 292, Magee & Ahles 758, Newcomb 351, Peterson & McKenny 224,288. See reference section below for full citations.

**SIMILAR SPECIES**

*Lythrum alatum* Pursch. (winged loosestrife)* Picture of *L. alatum*

*Lythrum alatum* is a rare plant that could be confused for *L. salicaria*. *Lythrum alatum* is usually shorter in stature, being around 40-80 cm (1-2.5 ft.) tall. The leaves of *L. alatum* are alternately arranged, except for the very lowest ones on the plant. The flowers of *L. alatum* are solitary in the upper axils while the flowers of *L. salicaria* are numerous and in a spike-like arrangement.

**REPRODUCTIVE/DISPERSAL MECHANISMS**

*Lythrum salicaria* reproduces through prolific seed dispersal. The seeds usually fall to the ground after they have ripened. They can...
be moved longer distances by water or by becoming attached to waterfowl.

**DISTRIBUTION**

The native distribution of *Lythrum salicaria* is central and southern Europe, Great Britain, and parts of Russia. It has been reported from every state in the United States except for Florida, Arizona, Louisiana, Georgia, Alaska and Hawaii. This plant occurs widely in New England.

**HISTORY OF INTRODUCTION IN NEW ENGLAND**

The first report of *Lythrum salicaria* in North America was in 1814. Before the year 1900, 14 of 30 populations of this plant were located in estuaries from Massachusetts to New Jersey. The location of these sites would indicate that the plant was introduced somewhere in this area. There are several hypotheses on how this plant was originally introduced. It could have been a part of ship ballast from Europe, or attached to sheep. *Lythrum salicaria* was also planted as a source of nectar for beekeeping, as an ornamental, and for medicinal reasons. By the 1900's there were more inland populations being reported, one of these being in New Hampshire. Since these initial introductions it has spread by being planted in gardens and by waterways.

**HABITATS IN NEW ENGLAND**

Coastal Grassland
Herbaceous Wetland
Lake or Pond
River or Stream
Shrub Wetland
Wet Meadow
Yard or Garden

*Lythrum salicaria* is most often found in situations where the soil is moist. However, it prefers areas with shallow water, and does not grow as prolifically in deep-water situations.

**THREATS**

*Lythrum salicaria* has the ability to completely dominate wetlands, forming a vast, monotypic stands. These stands prevent the establishment of native wetland plants. It can also have an effect on native wildlife that may not be able to use the plants as effectively for food or cover. By forming these dense stands, *Lythrum salicaria* can clog waterways, causing problems for both commercial and recreational uses of these areas.

*Lythrum salicaria* can produce up to 2.5 million seeds per plant. These seeds persist in the seed bank for years, even if the plants themselves are eradicated from an area. This plant can hybridize
with a native loosestrife, *L. alatum*, which is considered rare in Connecticut. With repeated hybridizations, it is possible that the gene pool for *L. alatum* could be depleted.

**MANAGEMENT LINKS**

Illinois Natural History Survey  
General description and management guidelines

The Nature Conservancy

Wisconsin Department of Natural Resources

The Connecticut Invasive Plant Working Group  
Invasive Plant Management Guide

Plant Conservation Alliance  
Fact sheet with management information

**DOCUMENTATION NEEDS**

Documentation required: A photograph of the plant habit, flowers or fruit.  
Best time for documentation: Summer, fall.

**ADDITIONAL INFORMATION**

Integrated Taxonomic Information System  
Taxonomic information

PLANTS Database  
General information and map

The Nature Conservancy  
Extensive description, biology, photographs and control information

Plant Conservation Alliance  
Fact sheet that includes images and control information

Virginia Native Plant Society  
General information including control

Ohio Perennial and Biennial Weed Guide  
Photographs and description

Wisconsin Department of Natural Resources  
Description, biology and control information

National Invasive Species Information Center  
Links to more information

Illinois Nature Preserves Commission  
General information and control

Adirondack Park Invasive Plant Program  
Identification, fact sheet, management and distribution information
REFERENCES


Farnsworth, E.J. and D.R. Ellis. 2001. Is purple loosestrife (Lythrum salicaria) an invasive threat to freshwater wetlands? Conflicting
evidence from several ecological metrics. Wetlands 21 (2): 199-209.


DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
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MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

- The whole New England area
- One or more states
- One or more counties
- One or more towns (county sub-divisions)

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