

Rattlebox

Sesbania punicea (Cav.) Fabaceae

INTRODUCTION

Sesbania punicea is widely used as an ornamental plant for its attractive compound leaves, bright red flowers and persistent winged fruit. As with many invasive ornamentals, rattlebox has found its way out of cultivation and into natural areas. It favors moist, wet environments and is often found along river banks and wetlands. *Sesbania punicea* is native to South America. All parts of *Sesbania* are poisonous, particularly the seeds.

DESCRIPTION

Sesbania punicea is a woody shrub that can grow up to 15 feet in height. The bark is covered with lenticels and is gray to reddish brown in color. Leaves are alternate, compound, 5 to 7 inches long. There are 7 to 16 pairs of small, oppositely arranged, elliptical 1 inch long leaflets. The fruit and flowers of rattlebox are characteristic of those in the legume family. Flowers are ½ to 1 inch long, are orange-red in color, and hang in clusters. Seed pods are 3 to 4 inches long and dark brown with longitudinal wings. There are 3 to 9 seeds per pod and make a rattling sound when shaken.

Sesbania spreads by seed and allows the plant to easily escaped cultivation. Many seeds are produced per plant, which are readily dispersed by water. Seed pods may also persist on the plant through the winter.

IMPACTS

Sesbania punicea displace native vegetation and wildlife by forming dense thickets. The greatest environmental impacts are near water bodies or along river and stream banks. This can decrease water flow and quality, and reduce recreation for boaters, fishers, and other activities. *Sesbania* is able to produce thousands of seeds and fully mature in one year. Germination rate for seed is very high and these are able to remain dormant for several years in the soil.

MANAGEMENT

Preventative: The first step in preventative control of rattlebox is to limit planting and removal of existing plants within the landscape. If possible, removal should occur before seeds are produced. Care must be exercised to prevent seed spread and dispersal during the removal process.

Cultural: Mulches may provide some suppression but are not feasible in most areas. Avoid large areas of disturbance where rattlebox and other invasive species can gain a foothold.

Mechanical: Cut larger plants and treat stumps. Pull young plants by hand or with a weed wrench. Mowing will help but is often not feasible due to wet soil conditions where this species prefers. Mechanical control prior to seed set will be helpful in controlling future infestations, but this must be practiced over a several year period as dormant seeds will continue to germinate.

Biological: There are biological agents under investigation for control of rattlebox, but nothing released to date.

Chemical: Glyphosate has been used unsuccessfully in Florida when used alone (1%, as a foliar spray) and in combination with triclopyr (1% Glyphosate, 1% triclopyr). A combination of mechanical and chemical control is likely to provide the best results but little research has been conducted in that area.

REFERENCES AND USEFUL LINKS:

Floridata Homepage: <http://www.floridata.com>

University of Florida Center for Aquatic and Invasive Plants:
<http://aquat1.ifas.ufl.edu/welcome.html>

University of Florida's Cooperative Extension Electronic Data Information Source:
<http://edis.ifas.ufl.edu/index.html>

Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp.

The Plant Conservation Alliance's Alien Plant Working Group. Weeds Gone Wild: Alien Plant Invaders of Natural Areas: <http://www.nps.gov/plants/alien/index.htm>

Pacific Island Ecosystems at Risk (PIER). Plant Threats to Pacific Ecosystems:
<http://www.hear.org/pier/threats.htm>

Invasive Plants of the Eastern United States: <http://www.invasive.org>

USDA Natural Resources Conservation Service. Plants Database: <http://plants.usda.gov>

Mature Plant

- Woody shrub, grows up to 15 feet tall
- Bark is grayish to reddish brown, covered with lenticels (small pits)



Leaves

- Alternately arranged
- Compound with 7 to 16 pairs of small leaflets
- Opposite arrangement of leaflets, each possessing a rounded leaflet tip



Flowers

- Flowers are brilliant red in color
- Hang in clusters
- Thin, pod-like fruit, containing several seeds
- Thousands seeds per plant, remain dormant in soil for several years

