

bouncingbet

Saponaria officinalis L.

Synonyms: *Lychnis officinalis* (Linnaeus) Scopoli, *L. saponaria* Jessen, *Silene saponaria* Fries ex Willkomm & Lange.

Other common names: bouncingbet soapweed, soapwort, sweet betty

Family: Caryophyllaceae

Invasiveness Rank: 34 The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

Description

Bouncingbet is a perennial herb that grows 12 to 35 inches tall and produces strong runners (Lid & Lid 1994). Stems are straight and stiff. The plants are glabrous or have few, small hairs. Leaves are ovate, entire, and prominently three-veined. Flowers are white to light red and up to 3 cm across.



Stem and leaves of *Saponaria officinalis* L. Photo by P. Tenorio-Lezama.

Similar species: Bouncingbet can be distinguished from other Caryophyllaceae species in Alaska by the presence of sepals that are tubular for half their length, two stigmas rather than the three to five stigmas of *Silene* and *Lychnis* species, and leaves that are broader than the leaves of *Dianthus* species.



Flowers of *Saponaria officinalis* L. Photo by Ohio State Weed Lab Archive.

Ecological Impact

Impact on community composition, structure, and interactions: Bouncingbet can form very large populations that dominate communities. Roots and seeds are slightly poisonous to humans and animals (Russell 1997). Animals typically avoid eating this plant.

Impact on ecosystem processes: Unknown.

Biology and Invasive Potential

Reproductive potential: Bouncingbet produces a large quantity of seeds and can reproduce vegetatively.

Role of disturbance in establishment: Bouncingbet can resprout when cut or grazed.

Potential for long-distance dispersal: Unknown.

Potential to be spread by human activity: Hay and other animal feeds can be contaminated by seeds or other plant parts. Bouncingbet is sold in some nurseries.

Germination requirements: Seeds do not require cold stratification to germinate.

Growth requirements: Bouncingbet is adapted to coarse- and medium-textured soils with pH between 5 and 7. It does not tolerate saline conditions. It is highly tolerant of drought and fire, and it can withstand temperatures as low as -18°F. This species requires 130 frost-free days to reproduce successfully (USDA 2002).

Legal Listings

- Has not been declared noxious
- Listed noxious in Alaska
- Listed noxious by other states (CO)
- Federal noxious weed
- Listed noxious in Canada or other countries

References:

eFloras. 2008. Published on the Internet <http://www.efloras.org> [accessed 4 November 2010]. Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.

Faarlund, and Sunding. 1992. Illustrated Flora of Norway and Northern Europe. Domino Books, Ltd., Jersey. Pp. 544.

Hultén, E. 1968. Flora of Alaska and Neighboring Territories. Stanford University Press, Stanford, CA. 1008 p.

ITIS – Integrated Taxonomic Information System. 2002. Available: <http://www.itis.gov/> [4 November 2010].

Distribution and Abundance

Bouncingbet is found in colonies in south-central Alaska. It grows along roadsides and in waste areas.

Native and current distribution: Bouncingbet is native to central and southern Europe, but it has spread throughout western and northern Europe (Faarlund & Sunding 1992). This species has become naturalized in northern Europe. Populations in northern Europe originated from contaminated ship ballast and escaped ornamentals (Lid & Lid 1994). Bouncingbet is present in the 48 states of the continental U.S. (USDA 2002).

Management

Mechanical methods discourage plants from growing. Chemical and biological control methods have not been reported for this species.

Lid, J. and D. T. Lid. 1994. Flora of Norway. The Norske Samlaget, Oslo. Pp. 1014.

Royer, F. R. Dickinson. 1999. Weeds of the Northern U.S. and Canada. The University of Alberta press. 434 pp.

Russell A. B. 1997. Poisonous plants of North Carolina. Department of Horticultural Science, North Carolina State University.

USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.