

Butter-and-Eggs Linaria vulgaris P. Miller

Synonym: Linaria linaria (L.) Karst.

Common Name: yellow toadflax, butter-and-eggs, wild snapdragon, common toadflax, ramsted, flaxweed, Jacob's ladder

Native Origin: southeastern Europe and southwestern Asia

Description: A perennial herbaceous plant in the figwort family (Scrophulariaceae) growing to a height of 1-2 feet. Plants have multiple stems that are smooth and grow in clumps from the rootstalks. The leaves are simple, alternate, grey-green, lance shaped, pointed, 1-2.5 inches long, smooth and hairless. Flowers



resemble snapdragons. Flowers are yellow with a dull orange center and occur in clusters of 15-20 on each stem. Butter-and-Eggs received its common name from the flower colors which resemble egg yolks and butter. Flowers bloom from July to late September. The fruit is an egg-shaped capsule with two locules and many seeds. The seeds are winged, disk-shaped, dark brown to black and viable in soil for up to eight years. A mature plant can produce up to 30,000 seeds annually (July to October). Seeds are dispersed by wind and water. The root system is made up of horizontal roots and rhizomes. Plants reproduce by seeds or creeping rhizomes.

Habitat: It occurs in a wide variety of habitats such as roadsides, fields, waste areas, railroad yards, rangeland, pastures, cultivated fields, meadows, forest edges and gardens. Plants are a problem in disturbed areas, especially those with sandy, gravelly or chalky soils. It prefers moist soil and may become stunted in dry conditions.



Distribution: This species is reported from states shaded on Plants Database map. It is considered invasive in AK, CO, CT, MI, MT, NJ, OR, VA, WA, WI, WV, and WY.

Ecological Impacts: The aggressive nature of this plant and its ability to form large colonies allows it to crowd out other vegetation. Once established, high seed production and ability to reproduce vegetatively allow for rapid dispersal and high persistence. Its rhizomatous habit makes the eradication of this species difficult.

Toxicity: Plants contain poisonous glycosides that are reported to be moderately toxic to livestock.

Control and Management:



- Manual- Hand remove small infestations; remove lateral roots to prevent growth of new plants from roots; mowing and tilling will help control but not eliminate.
- Chemical- It can be effectively controlled using any of several readily available general
 use herbicides such as Glyphosate, amitrole, diquat, and picloram for spot treatment.
 Glyphosate applied at early bloom provides some seasonal control, but regrowth may
 occur. Follow label and state requirements.
- **Biocontrol** Weevils- *Gymnetron antirrhini* and *Mecinus janthinu* and moths- *Calophasia lunula Calophasia lunula* and *Eteobalea serratella* are used for biological control of *L. vulgaris* in parts of Canada and the United States.

References: http://plants.usda.gov, www.nps.gov/plants/alien/map/eucy1.htm, www.forestimages.org, Czarapeta, Elizabeth J., Invasive Plants of the Upper Midwest: An Illustrated Guide to their Identification and Control, 2005. p.111 - 112, http://el.erdc.usace.army.mil/pmis/plants/html/linaria1.html, www.fs.fed.us/r4/sawtooth/botany/weeds/yellowtoadflax.htm,

www.npwrc.usgs.gov/resource/plants/explant/linavulg.htm, www.delawarewildflowers.org/1163.html, http://tncweeds.ucdavis.edu/esadocs/documnts/linadal.html

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Invasive Plants website: http://www.na.fs.fed.us/fhp/invasive_plants