

# May 2011

## Invasive Species of the Month

### Goatsrue (*Galega officinalis*)

**What?** Goatsrue, also known as French lilac, is a member of the Legume family (Fabaceae), and is a herbaceous perennial. Each plant tends to form a crown and grows to 2-6 feet tall. A plant may have 20 stems and a deep taproot. The first seedling leaves are large, oval, and dark green. Mature leaves are alternate, odd-pinnate with six to ten pairs of leaflets. Each leaflet has a small hair-like projection on its tip. The stems are hollow, cylindrical, and tubular. Flowering begins in June and continues into the fall. Goatsrue seed typically remains dormant until scarified and may remain viable for 10 years. Its white and bluish to purplish pea-like blossoms produce straight, narrow, smooth pods. Each pod contains 1-9 seeds; there may be upwards of 15,000 pods per plant. Seeds are bean-shaped and dull yellow in color. They drop to the ground when mature and may be spread by water, equipment, or animal manure. Goatsrue thrives in marshy fields, meadows, woodlands, sunny forest edges, semi-shaded fields, and along roadsides and stream banks. It prefers moist soils and full sun, but will tolerate light shade. It forms dense crowns capable of regenerating for several seasons. The plants have naturalized and spread along waterways. In 1873, a dairy farmer in France noted that goatsrue increased milk production by 30-50% in his cows. Several doctors subsequently confirmed empirical evidence that goatsrue is indeed a powerful "galactagogue" -- its name derives from gale (milk) and ega (to bring on). Goatsrue has been extensively cultivated as a forage crop, an ornamental, a bee plant and as green manure. But it is toxic to all ruminant animals, especially sheep. Livestock and wildlife losses would be expected to increase especially during dry years if animals graze in infested areas. Goatsrue replaces desirable vegetation in pastures and particularly along stream banks and irrigation canals. Though it is cultivated for forage in Eurasia, it is not clear why toxicity problems are more prevalent here. Goats may be resistant to the toxins and are grazed in larger numbers there. The plants' large woody rootstock is difficult to control. Alfalfa seed crops may become contaminated with goatsrue seed.

**Where?** It is native to the Middle East, and has been naturalized in Europe and western Asia. Historically, it was a popular garden plant in both Europe and the United States, partly because of its religious and medicinal values. In 1891, goatsrue was introduced to Cache County, Utah, for use as a forage crop. It was collected in Colorado, Connecticut and New York prior to the 1930s, and in Maine and Pennsylvania in the 1960s. Goatsrue is on the Federal Noxious Weed List. Goatsrue was found in a crop in Grant's Pass, Oregon in 2007 and currently is under eradication measures.

**Lookalike?** Although goatsrue may be confused with crown vetch (*Coronilla varia*), it is taller than crown vetch when upright. The flowers of crown vetch are usually more pink than those of goatsrue. The leaves and leaflets of goatsrue are pointed and larger than those of crown vetch. Goatsrue leaves "roll" as they develop, a characteristic visible even when the plant is very young.



Goatsrue foliage and flowers. Steve Dewey, Utah State University, Bugwood.org



Ham River Lands, London, 7th July 2007  
Photo: Peter Llewellyn

#### What can you do?

Be on the lookout for goatsrue, and report suspected invaders to [www.oregoninvasiveshotline.org](http://www.oregoninvasiveshotline.org) or 1-866-INVADER.

