

# PEST ALERT

## WEST VIRGINIA DEPARTMENT OF AGRICULTURE

Gus R. Douglass, Commissioner

### Goats' Rue (Professor Weed; French Lilac)

*Galega officinalis* L.



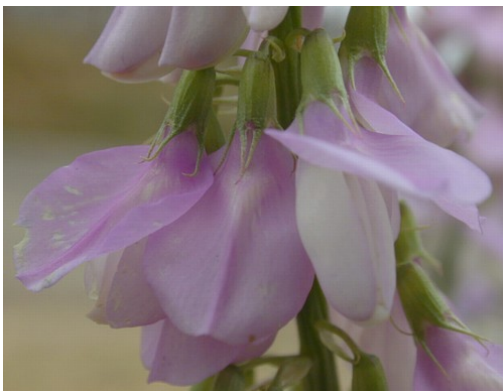
Goats' rue compound leaf (M. Storey).



Goats' rue leaves and inflorescence (USDA-APHIS; R. Norris).



Full size goats' rue plant (USDA-APHIS; R. Norris).



Close-up of individual goats' rue flowers (M. Storey).

Goats' rue, *Galega officinalis* L. (Fabaceae; pea or bean family), is native to southern Europe and western Asia and has become a major weed in Utah and Pennsylvania. Records have also been collected from 8 other states and Washington, DC. Historically, goats' rue was used as an ornamental plant and was tested as a forage crop in Utah. Most populations are likely the result of plants escaping cultivation and seeds being carried by streams. The plant contains a poisonous alkaloid which gives it a bitter taste and makes it unpalatable to cattle and horses. Goats' rue is reportedly fatal if ingested by sheep or goats (hence the plant's common name).

#### Description

Goats' rue is a bushy perennial herb. Goats' rue stems are robust, much branched, hollow, and 2 to 6 feet tall. Flower spikes are made up of 20 to 50 purple, blue, or white flowers, each about ¼ to ½ inch long. Its leaves are alternate along the stem, 7 to 9 inches long, and compound with 4 to 10 pairs of leaflets, plus a terminal leaflet. These leaflets are ½ to 2 inches long, narrow (less than ½ inch wide), and have a hair-like projection at the tip. The plant produces fruits in the form of pods that are 1 to 2 inches long, narrow, and round in cross section. Each pod contains up to 9 oblong, dull, mustard-yellow seeds.

#### Life History

Goats' rue is a perennial legume capable of forming large crowns. It begins flowering in June and will continue to have flowers and fruits until frost. Goats' rue primarily spreads by seeds which are transported via water, farm machinery, manure, and contaminated soil. Seeds are estimated to survive in the soil for 5 to 10 years.

#### Ecology/Habitat

Goats' rue is typically found in damp areas and waste places and is commonly found in cropland, fence lines, pastures, roadsides, waterways, and wet, marshy places. Goats' rue is highly competitive in wetlands and may form monoculture (single species) stands.

#### Similar Plants

There are many legumes in West Virginia that have similar leaf characteristics, so flowers and fruits are essential for identification. Goats' rue may be confused with crown vetch (a common ground cover planted along highway right-of-ways), but goats' rue is taller when upright and has a spike-shaped cluster of flowers (similar to snapdragons).

*For more information or to report suspected infestations, contact:*

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