

Galerucella pusilla

Golden Loosestrife Beetle

Weed(s) Attacked: Purple Loosestrife
SCNWCB February 2006

GENEALOGY

Original source for U.S. release was northern Germany. First U.S. releases were made in 1992. Now established in Idaho, Maryland, Minnesota, Montana, New York, Oregon, Pennsylvania, Utah, Virginia, and Washington. This agent is well established at sites in Stevens county.

LIFE CYCLE

Overwintered adults emerge from the soil and soil litter, feed on buds and leaves, mate, and begin to lay eggs in May and June. A distinctive line of frass is often placed on top of the egg. When the eggs hatch larvae feed on leaves and other plant parts before moving down into the soil or litter to pupate into adults. These new adults emerge in July and August and continue feeding before hibernating for the winter. If the female emerges before mid-July she often lays eggs before going to ground for the winter. Presumably, some of these eggs hatch, and if the larvae find enough remaining food to develop, will also descend to the ground to pupate into adults and overwinter.

EFFECT

Both the adult and larvae are destructive to Purple Loosestrife. Plants that are attacked are severely defoliated. They turn brown and are easy to spot.

REDISTRIBUTION

A good time to collect these agents is from mid May to mid June. Collect these agents by shaking the plant inside a sweep net. This agent and it's close relative *Galerucella calmariensis* readily establish at new sites which are not flooded year-round. If possible release 250-500 at a new site.

COMMENTS

About 70-80% of the *Galerucella* releases in the U.S. are *Galerucella pusilla*. The remainder are *Galerucella calmariensis*. They are very similar. The photo of the eggs and larva are *Galerucella calmariensis*, but *Galerucella pusilla* eggs and larvae look the same. These agents are a success story almost everywhere they are found. Within a few years after being released at Purple Loosestrife sites in Stevens county that weed has been heavily impacted. Occasional releases are still being made in Stevens County, but the agent seems to be doing well on it's own.

