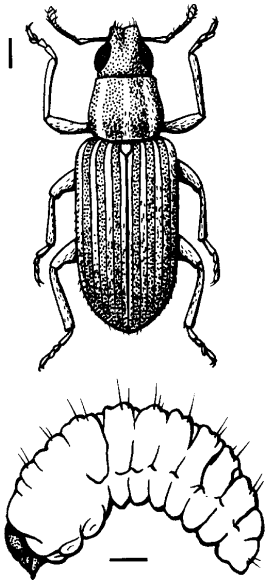
PEA LEAF WEEVIL **Coleoptera: Curculionidae** *Sitona lineata*

DESCRIPTION

Adults are gray-brown, slender, and about 4.5 mm long. Three light, inconspicuous rows of small scales, one central and two lateral, run lengthwise on the throax and extend onto the wing covers. Wing covers are marked lengthwise by parallel striations. **Larvae** are legless, 6 to 7 mm long, and white with a dark brown head.



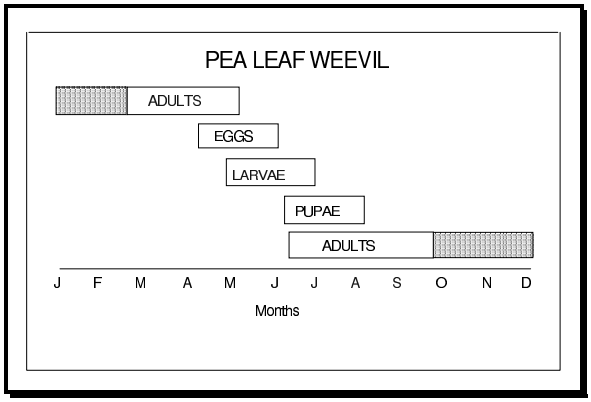
(after USDA Bull. 1233)

ECONOMIC IMPORTANCE

Adults can cause extensive damage to alfalfa and pea seedlings by cutting out semicircular notches in the leaf margins. Severe ragging of leaves or defoliation may occur if the infestation is heavy. Seedling alfalfa and peas are particularly susceptible to severe injury of the growing point. Larvae feed underground on the nitrogen fixing root nodules which causes the plants to become weakened if they are grown in nitrogen deficient soil.

DISTRIBUTION AND LIFE HISTORY

This pest is restricted in North America to Idaho, Oregon, Washington, and British Columbia. Adults overwinter under vegetation in old alfalfa and clover fields, field margins, or in waste areas. Adults begin emerging in mid-March on the coast and in late April or early May inland. Adults feed on the foliage of seedling plants and begin laying eggs. Eggs are scattered singly on the soil surface near host plants. Eggs hatch in 16 to 18 days and larvae move into the soil and begin feeding on root nodules. Larvae feed for 20 to 40 days then pupate in the soil. Adults begin emerging about two to three weeks later in July and August. These adults disperse to legumes, such as alfalfa and clover, and either aestivate during the summer months or feed and then enter hibernation to overwinter. In coastal areas, they become active in the fall and may feed during warm periods during the winter. There is one generation each year.



MANAGEMENT AND CONTROL

The entomopathogenic fungus, *Beauveria bassiana* often kills overwintering adults, but the number affected may be too low to significantly reduce the population in some years. The adult population should be sampled in alfalfa and clover in March and as an indicator of potential severity of infestations in May. The use of insecticides may be justified if there is more than 25% leaf injury on terminal leaves of seedling plants. Rapid seedling growth in the spring often enables plants to overcome or withstand feeding injury.