

## CLOVER ROOT BORER Coleoptera: Scolytidae *Hylastinus obscurus*

### DESCRIPTION

**Adults** are oblong-oval, about 2 mm long, with the pronotum slightly wider than long and narrower than the wing covers. The wing covers are marked with deep depressions in parallel grooves. Adults vary in color from tan shortly after emergence to dark red-brown when mature. **Larvae** are legless, about 3 mm long, and creamy-white with a light brown head.

### ECONOMIC IMPORTANCE

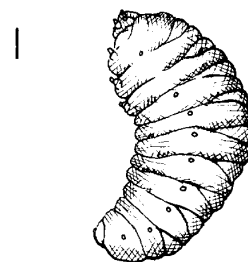
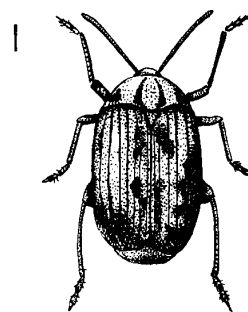
Injury to clover roots is caused by larvae and adults that feed in the taproot and larger secondary roots causing stunting and weakening of the plants. In addition to direct feeding injury, the incidence of vascular decay in roots is increased when borers are present. Fields of clover planted for seed production may produce well the first seed year, but decline rapidly and seldom survive to produce another seed crop.

### DISTRIBUTION AND LIFE HISTORY

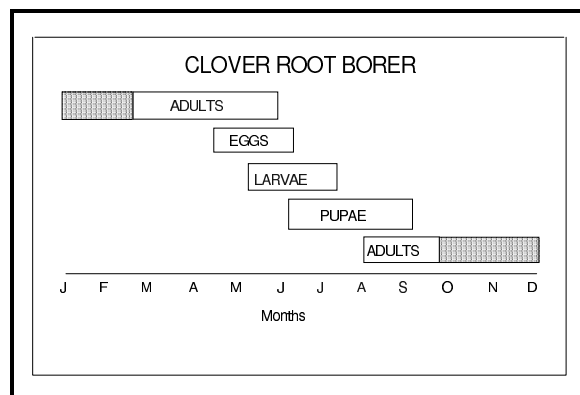
The clover root borer is of European origin and was first reported in New York in 1878. It is now found throughout the United States and occurs in all areas producing red clover. This pest overwinters as an adult in clover roots. Mating takes place in April, and adults disperse to plants in the same field or to distant fields in early May. When a suitable host is found, adults begin constructing galleries in the roots. Eggs are laid singly in cavities excavated in the galleries. Each female lays an average of 36 eggs during the season. Eggs hatch in one to two weeks and the larvae begin feeding within the roots. Larvae feed for about two months then pupate inside the root at the end of the larval gallery. The pupa period lasts about three weeks, and adults can be found in the roots beginning in early September. Adults remain in the roots until the following spring. There is one generation each year.

### MANAGEMENT AND CONTROL

Adults can be estimated by sampling and examining roots in different areas of the field in late March and April. An average of five or more larvae per root can result in a 43% reduction in above ground foliage. Larvae can be found in the roots from late May to



(after USDA Bull. 1426)



early August. At present, crop rotation is the only effective method of controlling this pest in clover grown for forage. There are no effective control measures for this pest in clover grown for seed.