In New Jersey, cranberry weevils are pests of blueberries, and can sometimes occur in cranberry fields in small numbers. The adults feed on the flower buds and subsequently lay eggs into developing flowers. Pin size holes in the buds and blossoms are an indication of adult feeding damage (Fig. 1). Throughout the spring and early summer, damage is caused by: (1) the adults that continue to feed on buds, flowers and leaves; and (2) larval feeding that causes buds to turn purple and remain unopened. Damaged buds eventually wither and fall to the ground (Fig. 2). Leaf feeding by the adult weevils can be observed through July, although this rarely becomes a significant problem for growers. This latter type of damage is represented by small, irregular holes in the leaves and skeletonization in extreme cases.

Identification

**Adult** weevils are about 1/8” (~2 mm) long, dark reddish-brown with two light bands of hairs on the wings (Fig. 3 and 4). The front part of the head is elongated into a slender and curved snout, which is about one-half as long as the rest of the body. **Eggs** are smooth, round, 1/16” (1 mm), and difficult to see inside the bud. The white legless whitish **grubs** (1/8”, 2 mm) feed inside the bud, consuming the internal flower parts (Fig. 5).

Life History

In blueberries, cranberry weevils complete one generation per year. Adults overwinter in debris in wooded areas in and around commercial blueberry fields. Adults begin flying to blueberry bushes on sunny days in early spring when temperatures reach ca. 60°F which coincides with bud swelling. Females start laying eggs singly into flower buds through feeding holes. Each female typically lays 50-60 eggs during her life, with most of the eggs laid in late April. Females sever the pedicel with their mouthparts after egg laying. The larvae hatch in 3-9 days and start feeding on the internal flower parts. Developing larvae entirely consume the inside of a flower bud so that only a thin brown shell is left in which it pupates. Newly emerged adults appear in late May through July.

Scouting

Monitoring for adults should start at bud swell and continue through bloom. Weevil pressure tends to be higher at the wooded borders of fields, so scouting efforts should be focused on these areas. Adult cranberry weevils can be collected from blueberry plants on sunny days by shaking the bush over a white cloth. On cool, cloudy days feeding injury can be visually observed on the blossom clusters. The treatment threshold is

---

**Fig. 1** Cranberry Weevil in Blueberries

**Fig. 2**

**Fig. 3**
five adult weevils per bush or at least one injured (feeding punctures) blossom cluster out of five clusters. Monitoring should be done by examining at least 10 randomly selected bushes per site. Alternate host plants for the weevil, such as staggerbush and wild blueberry, are commonly found in New Jersey woods, thus surveying the woods around the field for the presence of plants that harbor cranberry weevils can provide some information on problematic areas. After blueberry bloom, newly emerged adult weevils tend to move out of the blueberry fields and aggregate on these alternate host plants prior to entering diapause.

Control

Eggs and larvae are concealed inside the plant tissue throughout their development, therefore management practices are mainly targeted at the mobile adults. Since populations tend to be localized, management methods should target those areas that have the highest infestations, usually in border rows along woods. If insecticide applications are required, honey bees should not be placed into the field for at least five days after application or until the danger to bees of any insecticide residues has completely dissipated. Although the cranberry weevil has natural enemies, their identity and overall importance is not well known.