

Colorado Insect of Interest

Cherry Curculio

Scientific Name: *Anthonomus consors* Dietz

Order: Coleoptera (Beetles)

Family: Curculionidae (Weevils)

Identification and Descriptive Features: The cherry curculio is a small (ca. 2.75 mm) reddish-brown weevil with a slender, slightly curved beak. In superficial appearance it resembles bud scales and fruit-stem scars, allowing it to blend in well with its surroundings.



Figure 1. Cherry curculio next to oviposition wound on tart cherry fruit.

The larvae are legless cream colored grubs with spotting, found within the pit.

Distribution in Colorado: Probably generally distributed in much of the state in association with native stands of chokecherry. Museum records of this species are from Larimer, Jefferson, Durango, Fremont, and Boulder counties.

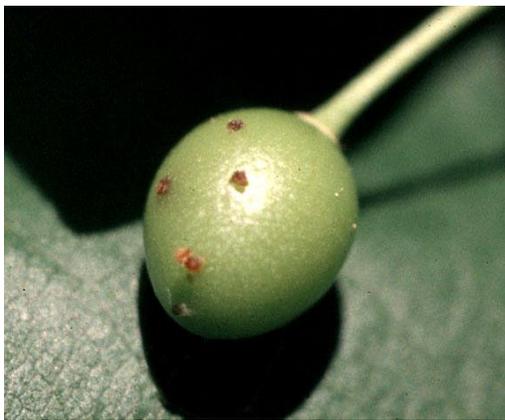


Figure 2. Multiple cherry curculio feeding wounds on tart cherry.

Life History and Habits: The cherry curculio is a native insect of chokecherry but may seriously damage cultivated tart cherries.

Winter is spent in the adult stage, with the weevils sheltered under debris or grass clumps in the vicinity of previously infested plants. They become active in spring, flying to host plants around the time of blossoming. They are good fliers, but normally appear to disperse only short distances. On their cherry host plant most activity occurs in more open areas - the upper crown and exterior.

Typical of weevils, the cherry curculio feeds by chewing with tiny mandibles that tip the long snout. They originally feed on blossoms, particularly the fleshy base, often destroying the developing ovaries. Early in the season feeding may occur at the junction of the fruit and stem, resulting in fruit drop.

As fruit develops they feed on fruit producing distinctive feeding punctures that may extend into the developing pit on small fruit. Dark scars mark the surface of feeding injuries and dark, toughened tissue at the feeding site may “tie” the skin to the pit. Multiple feeding injuries may

occur on a single fruit, as the insects normally move around little. A single cherry curculio may make over 100 feeding punctures during the 4-6 week period of spring activity.

Egg laying begins when fruit are shedding the “husk”; fruit are about the size of a small pea at this time. Females lay eggs in the developing pit, after chewing through the fruit. On the fruit surface, these oviposition wounds appear similar to normal feeding wounds, but internally are



Figure 3. Cherry curculio larva developing within tart cherry pit.

broader. The egg is inserted into the tunnel and, after eggs are deposited, a tiny plug of excrement usually is laid down to seal the wound. Egg laying continues over a period of 2-3 weeks, peaking when cherries are about half of their full-size.

The larvae complete their development in the pit and pupation also occurs within the pit. The new generation of adults chew their way out and emerge from the fruit around the time the fruit ripens. They feed for only a brief period, less than 2 weeks, then move to winter shelter where they remain until the following season.

Related Species: The plum gouger, *Coccotorus scutellaris* Le Conte, is a weevil that feeds on the fruit of native plums; certain cultivated plums are occasionally damaged. It is slightly larger than the cherry curculio and generally gray.

Control: Numerous natural enemies attack cherry curculio, particularly several species of parasitic wasps. Parasitism percentages may typically affect 50-75 percent of the developing larvae.

In small cherry plantings some control can be achieved by shaking branches to dislodge adults; these can be collected on sheets laid underneath the trees. The dislodged weevils typically feign death and may retract their legs. It is suggested that shaking be done when temperatures are between 65-70⁰F, as the insects are active and can be dislodged but do not readily fly. Branches should be repeatedly shaken as many of the weevils cling tightly and are not readily dislodged.

Insecticides have not been tested to control this insect. Although no insecticides specifically mention control of this insect, several “fruit sprays” that are used for other fruit feeding weevils and are labeled for use on cherry should be effective. It is suggested that if treatments are attempted the best time to make applications is just after blossom fall, when the weevils are cutting stems and eating the base of small fruits. A repeat application just after the “husks” have fallen from the small fruit may also be useful.

As this insect also utilizes chokecherry as a host, it is suggested that cultivated cherry plantings be kept isolated from chokecherry.

Key Reference: There is only one major study that has been conducted with this species. This account is largely based on the following: List, G.M. 1932. A cherry pest in Colorado. Colorado Agricultural Experiment Station Bulletin 385. 106 pp.