

Weevils attacking tree fruits in Washington
Pear Drips 1 gen/yr - Full s

Elizabeth H. Beers, Mike Klaus¹, Astrid Gebhard², Steve Cockfield³, Rich Zack, and C. W. O'Brien⁴

Washington State University, Tree Fruit Research and Extension Center, Wenatchee, WA

¹Washington State Department of Agriculture, Yakima, WA

²AG IPM, Benton City, WA

³Okanogan Valley IPM, Brewster, WA

⁴Center for Biological Control, Florida A&M University, Tallahassee, FL

Abstract: Weevils are not currently considered tree fruit pests in Washington State, but attacks by weevils have been mentioned as early as 1911. The advent of modern synthetic organic pesticides may have virtually eliminated weevils in commercial orchards in the intervening period. Recently several cases of weevil attacks have occurred on apple and cherry in several fruit growing regions in Washington and Oregon. The first case (in April 2000) occurred in a newly planted cherry orchard in Arlington, Oregon. The buds were heavily attacked by adult weevils shortly after planting, and could have caused substantial growth reduction or distortion. The weevil was identified as *Lepesoma*[=*Dyslobus*] *n. sp.* Reports of bud-feeding were made and investigated on two additional cherry orchards in Washington State in 2001. In one orchard (Quincy area) the predominant species was *Ophryastes cinarescens*, and in the other (Brays Landing area) the predominant species was *Stammoderes lanei*, with some *O. cinarescens* present. Sagebrush (*Artemisia tridentata*) is probably the native host of all three weevil species, and the common thread of the attacks was cherry orchards planted into uncultivated ground in or near sagebrush. In 2002, a severe infestation of a leaf-notching weevil species (tentatively identified as *Otiiorhynchus meridionalis*) was found in an apple orchard on Bench Rd., ca. 5 miles west of Othello. This same species was subsequently found at three other apple orchards, one in East Wenatchee near Pangborn Airport in an organic orchard; one in the Brewster-Bridgeport area; and one near Vantage, WA. At the latter orchard, an isolated 600-acre apple ranch on the west side of the Columbia River, two additional weevil species have been problematic for a number of years. These species, tentatively identified as the strawberry root weevil (*O. ovatus* L.) and the black vine weevil (*O. sulcatus* F.), girdle the stems of developing fruit in late spring and summer.