Rhubarb Curculio

Coleoptera: Curculionidae, Lixus concavus Say

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Description Adult rhubarb curculios are elongated, somewhat cylindrical beetles measuring about 13-19 mm (0.5-0.75 inch) in total body length. They have an obvious long snout that curves downwards from the head. Young adults have a dusty coating of yellow or orange powder that rubs off easily. Older beetles that have lost this dusty coating appear brownish-black in color. Mature larvae are legless white grubs with a brown head capsule. Rhubarb curculio larvae are only found in weedy hosts and not in rhubarb itself. There are a number of related, similar-looking weevils that occur on various weeds in the Asteraceae and Polygonaceae families.

Range and Plants Attacked Rhubarb curculio is native to North America and historically fed on native, weedy species of dock (*Rumex* spp.). The



Adult rhubarb curculio, *Lixus concavus*. (Jennifer C. Giron Duque, University of Puerto Rico, Bugwood.org)

weevil adapted to feeding on rhubarb, a relative of dock, when the plant was introduced from Europe. Rhubarb weevil is found from New England west to Idaho and south to Florida and Louisiana. In addition to rhubarb and weedy species of dock (Rumex spp.), rhubarb weevil also feeds on sunflower and thistles.



Feeding and oviposition sites produced by rhubarb curculio, *Lixus concavus*. (Roger Griffith, Wikimedia Commons, public domain)

Damage Adults notch the edges of leaves and stalks as they feed. They also make shallow round or oval depressions on the stalks as they feed and oviposit there. Injury by rhubarb curculio often goes unnoticed until drops of gummy sap appear on the rhubarb stalk at these feeding and oviposition sites. Dark streaks may appear on the stalks later as decay develops in these wounds.

Life History Adults overwinter in plant debris and other protected locations. They become active in late spring and appear on the leaves of rhubarb and alternate weedy hosts. Eggs deposited in rhubarb do not develop because the rapidly

growing plant tissue crushes the eggs. Females lay eggs in plant stalks of non-rhubarb hosts and larvae emerge in about 7-10 days. Larvae tunnel downwards through the stalk towards the crown and pupate at the base of non-rhubarb host plants in the soil. Adults emerge a few weeks later and feed until temperatures begin to drop, after which they find suitable protected locations to spend the winter. One generation of rhubarb curculio occurs annually.

Cultural Control Handpick and destroy adults as found. They are often seen resting on the leaves of their host plants. Disturbed adults will drop off the plant quickly, so place a bucket underneath to catch them. Removing and destroying any weedy alternate hosts (dock, thistle, and sunflower) near the rhubarb plantings in mid-summer is helpful to reduce any larvae developing in their stalks. Adults overwinter in debris near the host plant, so removing dried rhubarb leaves and other debris from the rhubarb plantings in the fall may reduce the number of adults present the following spring.

Organic/Biological Control There are no suitable organic or biological controls for rhubarb weevil at this time.

Chemical Control Rhubarb curculio is only a sporadic pest of rhubarb and can be easily managed using cultural controls. Insecticide use to control rhubarb curculio is not recommended in either commercial production or home gardens.