University of Minnesota
EXTENSION
www.extension.umn.edu

Rose Chafers

M1198 2007

Jeffrey Hahn, Associate Professor
Department of Entomology

The rose chafer, *Macrodactylus subspinosus*, is commonly found in many areas of Minnesota, particularly areas with sandy soil. It is a pest on many different types of flowers, fruits, trees and shrubs.

Identification

An adult rose chafer is a moderate-sized insect, measuring between 5/16-inch to almost 1/2-inch in length. It's a slender beetle, pale green to tan in color with reddish brown or orangish spiny legs. It has short, lamellate antennae, *i.e.* a series of flat plate or page like segments. A rose chafer sometimes resembles a wasp when it's flying.

The larval stage is called a grub and has a brown head and conspicuous legs. Like other grubs, it's body is bent into a 'C' shape. Fully grown, a rose chafer larva is about 3/4-inch long. Rose chafer larvae are rarely, if ever, seen.

Life Cycle

Adults emerge from the ground in late May and early June. Because the rose chafer prefers sandy soil to lay eggs, plants located on sandy sites are most likely to be attacked. Adult beetles feed on plants for three or four weeks, generally until late June. Females lay eggs in the soil, then die shortly afterwards.

Two to three weeks later, the eggs hatch into small, white grub like larvae which feed on the roots of grasses and weeds. The larvae spend the winter in the soil below the frost line. They pupate the following spring and then emerge as adults. There is one generation a year.

Damage

Adult rose chafers feed primarily on flower blossoms, especially roses and peonies, causing large, irregular holes. They also damage fruits particularly grape, raspberry, and strawberry. Rose chafer also feed on the foliage of many trees, shrubs and other plants, such as rose, grape, apple, cherry, and birch. Rose chafers typically damage leaves by eating the leaf tissue between the large veins, a type of injury known as skeletonizing.

Rose chafers contain a toxin that can be deadly to birds, including chickens, and small animals when they eat these beetles.

Figure 1. Rose chafer

The larvae feed on the roots of grasses and non-crop plants. They do not cause damage to home lawns or landscape plants.

Management

Gardeners should regularly monitor their gardens starting in late May, especially if you have a history of rose chafer infestations. Protecting plants from rose chafers can be challenging, especially when large numbers are present.

Non-chemical

Physically remove rose chafers, especially when small numbers are present. Remove them from plants and into pails of soapy water to kill them. Because rose chafers are good fliers, more can fly into your garden and you will need to check your plants routinely for any additional rose chafers.

You can protect some plants by erecting a physical barrier, such as a cheesecloth or floating row cover around them. Place the barriers just as rose chafers become active and take them down after the rose chafers are done feeding (after June).

Insecticidal

If large numbers of rose chafers are present, you can treat plants with a garden insecticide. You may need to treat plants more than once when rose chafers are numerous.

Examples of common names of active ingredients

Common name	Residual*	Notes
bifenthrin	long	contact
esfenvalerate	long	contact
cyfluthrin	medium - long	contact
imidacloprid	long	systemic**
permethrin	medium - long	contact
carbaryl	medium	contact**

** Long residual can persist as long as four weeks. Medium residual can persist as long as 10 - 14 days.*

*** Absorbed by the plant tissue; typically applied to soil*

You can find the common name for a pesticide by examining the label and looking under *Active Ingredients*. Be sure the product you plan to purchase is labeled for the plant(s) you intend to treat. You can verify this by reading the specific list of sites and plants the product is cleared for under *Directions For Use*. Look closely as this usually in small print.

CAUTION: Read all label directions very carefully before buying insecticides and again before applying them. Information on the label should be used as the final authority.

Figure 2. Typical damage on flower blossoms from rose chafer

Photographs by Jeff Hahn.