Rose Chafer: Biology and Control
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Flower Tips
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Rose Chafer: biology and control

By John E. Gergen, Extension Agricultural Agent, and Gary A. Dunn, Department of Entomology

The rose chafer, *Macrodactylus subspinosus* (Fabricius), is native to this country and occurs throughout the United States east of the Rocky Mountains. Despite its name, the rose chafer feeds on many plants.

Description

Adults are ⅓ to ½ inch long, elongate, hard-shelled and yellowish tan with a reddish brown head and orange to dark brown, spindly legs. The larvae are C-shaped white grubs similar to other common white grubs, except that they tend to be smaller, measuring ½ to ¾ inch. They have pale brown heads.

Life cycle

Rose chafers have one generation a year. They overwinter in the larval (grub) stage just below the frost line. In the spring, the larvae transform into the non-feeding pupal stage, which lasts about three weeks. The insects then emerge as adults in late May and early June and are on the wing for about three weeks. The entire beetle colony reaches maturity practically at the same time, and hordes of beetles suddenly make their appearance, all hungry.

During this period of heavy feeding, the adults mate. It is common to see rose chafers in coupled pairs. The females lay their eggs in grass, alfalfa or clover sod in sandy, well-drained areas. They frequently lay their eggs some distance from the place where the adults cause injury. Therefore, it is virtually impossible to prevent an infestation by controlling larvae.

The grubs feed on the roots of grasses, trees and other plants but generally do not seriously injure the plants. When full grown, the larvae leave the root zone and descend into the ground to construct cells in the soil where they overwinter.

Injury

Rose chafer beetles appear in large numbers in late May and early June, about the time roses begin to bloom. They have voracious appetites and feed on leaves, flowers and fruits. They frequently skeletonize leaves, leaving only the larger veins intact. Plants attacked by the adult beetles include the rose, iris, peony, geranium, hollyhock, hydrangea, dahlia, poppy, wisteria, Virginia creeper, raspberries, blackberries, apple, pear, peach, plum, strawberry, cabbage, corn and elm. Damage tends to be most severe in or near areas of light, sandy soil. Heavy clay soils hamper the growth and development of rose chafer larvae.

Rose chafers are toxic to chickens and can be fatal when eaten.

Cultural controls

Only a few chafers can do noticeable damage. If you have only a few plants or a small garden, remove the beetles by hand. They are conspicuous and move slowly, so they can be picked easily from the plants and crushed or dropped into a jar containing kerosene. You also can shake them off the plants onto sheets saturated with kerosene, into a shallow pan containing kerosene, or onto sheets or newspapers and then funnel them into the kerosene. A funnel-shaped device ending in a container holding kerosene is sometimes used. Frequent inspection and removal may be necessary, because the beetles are strong fliers and can easily reinvade an area.

Because the adult beetle is active for only a short time, a few plants may be effectively protected from this pest by covering them with screen or cheesecloth. The pupae are easily destroyed by thoroughly cultivating the soil early in the spring. This is the most efficient remedy if you happen to cultivate the larval areas, but most beetles that infest home grounds will have emerged some distance from the damage site.

Chemical control

If the beetle is present, carbaryl (Sevin) and methoxychlor are effective control chemicals. Spray all plant parts except the flowers—the pesticides are hazardous to insect pollinators. Read the pesticide label before use and carefully follow all precautions and instructions. As many as four sprays may be required at weekly intervals or after rains to control large beetle populations or to protect valuable plants. However, let the effectiveness of your first spray be your guide. NOTE: Damage may not be noticed until after the beetles have already left for the season. If no rose chafers are present, spraying will be of no benefit and should be avoided.

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