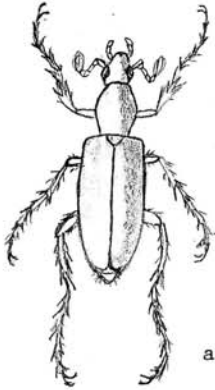


ROSE CHAFER

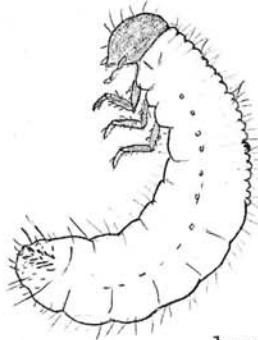
Macrodactylus subspinosus (Fabricius)

DISTRIBUTION-This common native insect is distributed over the entire eastern US and southern Canada as far west as the Rocky Mountains.

DESCRIPTION-The adult rose chafer is an ungainly, slender, long-legged beetle $\frac{1}{2}$ to $\frac{3}{4}$ inch in length. The head and legs are reddish brown and the undersurface is blackish, but the overall body color is fawn or straw-colored from the small yellowish hairs over the body. As the yellow hairs are worn off, the color becomes more gray or mottled in appearance. The larva is a typical white grub about $\frac{3}{4}$ inch in length when full grown, closely resembling the japanese beetle grub. The larva is yellowish-white with a pale brown head capsule and with three pairs of legs. The body is held in a characteristic C-shaped position.



adult x 4



larva x 4

HOSTS-Grape, apple, birch, crabapple, mountain ash, elm, hydrangea, virginia creeper, geranium, hollyhock, peony, rose, raspberry, bean, corn and many other plants.

DAMAGE-Adult rose chafer beetles damage plants by eating the foliage, buds and ripening fruit. Badly damaged leaves and flowers may look like lace. Foliage, blossoms and young fruit of grape may be severely damaged as well as the blossoms of rose and peony and the foliage of mountain ash and siberian elm. The grubs, which live in the soil, feed on the roots of grasses and other plants. Poultry have been poisoned and killed by eating rose chafers.

LIFE CYCLE-Rose chafer adults appear in numbers about mid-June or about the time that grapes bloom. Soon after emergence, the beetles mate and begin feeding and 4 to 6 weeks later, beetles may still be found feeding, almost constantly paired. An individual adult probably lives about 3 weeks. Rose chafers are active during the day, like japanese beetles. The female chafer deposits 24 to 36 eggs singly, a few inches beneath the soil surface. Eggs hatch in about 2 weeks and the young larvae begin feeding on tender grass roots. The larvae are generally found in uncultivated land, especially in sandy areas, to a depth of 10 to 16 inches. In the fall, the nearly full-grown larvae descend lower in the soil to below the frost line, where they pass the winter in earthen cells. In the spring, the larvae work back up toward the surface and feed for a short time on the roots of grasses, weeds, nursery stock and other plants. They pupate in May and emerge as adult beetles in 2 to 3 weeks. There is only one generation a year for this insect.

CONTROL-Cultural: Very few grubs of the rose chafer are found in cultivated land. High pupal mortality can be achieved by plowing, cultivating or harrowing to a depth of 3 inches or more, especially if done in late May or early June. Keep heavier soils in grass and sod and use sandier soils for cultivated crops to reduce rose chafer numbers. Keep all weeds and grasses controlled in grape arbors.

Mechanical: In home gardens, rose chafer adults may be handpicked or jarred from small shrubs, flowers and vegetables into a can or ground cloth and then destroyed. This method must be practiced daily in early morning and towards sundown to be effective. Valued plants may be protected by covering with cheesecloth during the 4 or 5 weeks when adult beetles are present. Grape clusters may be bagged temporarily for protection. Early flowering trap or lure plants (such as Spirea, Deutzia, Andromeda, white rose and blackberry) may congregate early arriving chafers to facilitate handpicking and reduce damage to more desirable plants.

Chemical: Rose chafer grubs in lawns and turf areas can be controlled with one of several grub-control insecticides such as Merit and diazinon. However, it is not always possible to determine where the chafer grubs are concentrated to get the most effective control. Most foliage and flowers can be protected from adult beetles by spraying or dusting with materials such as carbaryl (toxic to bees), acephate, methoxychlor, diazinon, permethrin or Neem products. Begin treatments as soon as beetles first appear and repeat as necessary getting thorough coverage.

Adapted from University of Vermont Extension Leaflet 39, Rose Chafer by G. R. Nielsen
Before applying any pesticide, READ THE LABEL. Pesticides must be applied only as directed on the label to be in compliance with the law.