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# HOPLIA BEETLE

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*Integrated Pest Management for Home Gardeners*

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The hoplia beetle, *Hoplia callipyge* (family Scarabaeidae), is a common pest of roses and other plants in many parts of California, especially the Central Valley. Because it has just one generation a year, it is a problem only from late March to May when the adult beetles feed on light-colored blossoms.

## IDENTIFICATION

The adult beetle is oval shaped, about ¼ inch long. The head and thorax are dark reddish brown, and the wing covers are dark to light brown. Most of the body is a beautiful iridescent silvery-green in sunlight. The larvae are small, crescent-shaped grubs that live in the soil. The hoplia beetle is in the same family as the Japanese beetle and is sometimes mistaken for that insect. However, there are currently no known populations of Japanese beetle in California. The hoplia beetle is also often mistakenly identified as the rose chafer, another pest beetle of roses (see *Pest Notes: Roses in the Garden and Landscape—Insect and Mite Pests and Beneficials*, listed in References).

## LIFE CYCLE

Female beetles lay glossy white eggs in the soil of alfalfa fields, pastures, and in other areas of undisturbed vegetation, such as along fences and ditches. The larvae feed on decaying vegetation and plant roots but do not damage woody plant roots. They develop slowly, remaining in the larval or pupal stage throughout the winter. In early spring they complete development and adult beetles emerge from the soil. The adults fly to gardens where they feed on roses and other

flowers. Adults are generally active from late March to early May. After feeding for several weeks, adults fly back to their egg-laying sites. There is a single generation each year.

## DAMAGE

Hoplia beetle adults are especially attracted to light-colored flowers and chew round holes in the petals of white, yellow, apricot, and pink roses. Early buds and flowers of roses may be destroyed by chewing. The beetles do not feed on leaves. Hoplia beetles also feed on the flowers of calla, citrus, irises, lilies, magnolia, olive, peonies, poppies, and strawberries, and on the young leaves and fruit of grapes, peaches, and almonds.

## MANAGEMENT

One way to manage hoplia beetles in your garden is to regularly hand-pick them off the flowers they are feeding on and dispose of them in a bucket of soapy water, or shake them out of the blooms directly into the soapy water. You can also just clip off blooms infested with beetles and dispose of them. Regular hand-picking may be an important way of reducing future beetle populations in the immediate area.

Another nonchemical control measure is to fill white, 5-gallon buckets with water and a few drops of detergent to break the surface tension. These buckets are then placed in several locations throughout the rose garden where they attract the beetles, which fall in the buckets and drown. The effectiveness of this method has not been tested by

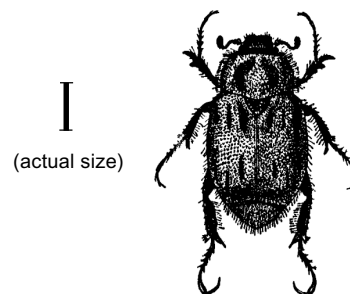


Figure 1. Hoplia beetle.

research. Like hand-picking, it may only serve to reduce the beetle population somewhat.

When planting roses in an area where these beetles are plentiful, consider choosing darker-colored varieties such as red roses to help avoid problems with this pest.

Sprays are not generally recommended. It is very difficult to obtain effective control with insecticides because beetles are protected within the blossoms and they must be contacted directly by the spray to be killed. Chemical control of the larvae in most cases is not possible because they may live in the soil outside the garden or in surrounding landscapes. Systemic insecticides aren't effective against the adults because concentrations high enough to be toxic do not occur in the blossoms where they feed. If chewing damage cannot be tolerated for the 2- to 4-week period that the beetles are present, an insecticide such as carbaryl (Sevin), malathion, or the pyrethroid cyfluthrin can be applied. These insecticides only kill those

beetles present at the time of the spray applications. Do not spray blooming plants where honeybees are present, because most insecticides are very toxic to honeybees. Avoid use of these insecticides when possible. They are harmful to natural enemies and some materials have been found in urban surface water systems at levels that warrant concern.

## REFERENCES

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### WARNING ON THE USE OF CHEMICALS

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash nor pour pesticides down sink or toilet. Either use the pesticide according to the label or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Household Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

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