

Asparagus Beetles

Coleoptera: Chrysomelidae, *Crioceris asparagi* (L.) and *Crioceris duodecimpunctata* (L.)

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Distribution

Throughout Virginia wherever asparagus is grown.

Description

Two species of asparagus beetles are found in Virginia, the asparagus beetle, *Crioceris asparagi* (L.), and the spotted asparagus beetle *Crioceris duodecimpunctata* (L.). Adults of the asparagus beetle are 1/4 inch (6.25 mm) long, metallic blue to black, and have wing covers with three or four white spots and reddish margins. The thorax is red and usually marked with two black spots. The spotted asparagus beetle is about 1/3 inch (8.3 mm) long and orange with 12 spots on its wing covers. Larvae of both are olive green to dark gray with a black heads and legs. Larvae measure about 6/100 inch (1.5 mm) at hatching, and as they develop they become plump and attain a length of about 1/3 inch (8 mm). Both have eggs that are approximately 4/100 inch (1 mm) long, oblong, shiny, black, and are attached by one end to asparagus spears.

Plants Attacked

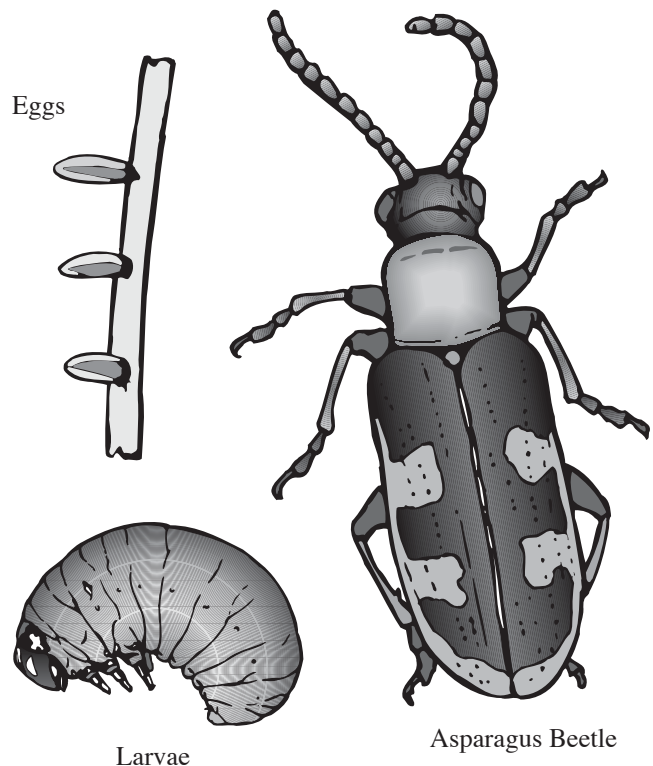
Asparagus.

Damage

Adults and larvae chew on shoots and foliage; eggs are laid on shoots around the time of harvest. Presence of eggs on the spears is objectionable to some although the eggs themselves cause no damage.

Lifecycle

Asparagus beetles overwinter as adults in plant debris. In spring the beetles first feed on the tender asparagus spears and tips of buds, subsequently depositing their brown to black eggs on spears. In about a week the larvae hatch and join the adults feeding on the spears and ferns. After the larvae mature through four instars (in approximately eight days) they enter the soil beneath plants and pupate, emerging from the soil as adult beetles in five to ten days. Later in the season, another generation of eggs will be laid on the stems and foliage of the asparagus plants. In Virginia, there are two generations per year.



Cultural Control

Harvest spears as early as possible. Beetles are attracted to plants with an abundance of foliage; therefore, growers can leave a small portion of their crop unharvested as a decoy for beetles to congregate, while the rest of the crop is harvested. Thoroughly remove all plant debris from garden and surrounding areas after harvest to eliminate beetle overwintering sites.

Organic/Biological Control

Spray or dust with botanical insecticides when larvae are first noticed feeding on plants. Important natural enemies of asparagus beetles include a tiny parasitic wasp, *Tetrastichus asparagi* Crawford, which attacks eggs, and several species of lady beetles, which feed on asparagus beetle eggs and small larvae.

Chemical Control

Treat with a registered insecticide when beetles begin to lay eggs, or when beetle larvae are feeding on the foliage. Because asparagus spears are harvested almost daily, it is important to use an insecticide with little residual activity. Be sure to follow the necessary wait period between insecticide application and the days before you can harvest again.

A second possibility is to treat in the fall with a registered insecticide to reduce the beetle population before they overwinter and thus reduce the number of beetles the following spring.

On newly planted beds of asparagus, consider treating more frequently to spare the young plants excessive damage and to promote vigorous establishment.