Two-spotted ladybird (Adalia bipunctata)

Generalist predator

DESCRIPTION:

Adalia bipunctata is a species of beetle that feeds on aphids and other small insects. *A. bipunctata* larvae and adults both feed on aphids. The larvae have black elongated bodies with six legs and white and yellow spots. The adults are 4-5mm long, ovular, and are either red with two black spots, or black with red spots. Eggs are yellow-orange, ovoid in shape, and are lain in clusters.

TARGET PEST:

Wide variety of aphid species, psyllids, and mites.

LIFE CYCLE:

A complete life cycle takes 16-20 days at 68°F (20°C). *A. bipunctata* populations have an equal number of males and females.

Females lay an average of 20-50 eggs per day. Eggs are laid in clusters near aphids. Newly hatched larvae will consume their egg shell and immediately begin to seek out prey. *A. bipunctata* can consume up to a total of 100 aphids/day and adults live for 2-3 months.

USE IN BIOLOGICAL CONTROL:

A. bipunctata is mainly used to control aphids in ornamental, fruit and vegetable crops. Optimum conditions are 75°F (24°C)- 82°F (28°C) with relative humidity 70-80%.

MONITORING TIPS:

Use a 10-15x hand lens to inspect for *A. bipunctata*, which are most often found near aphid hotspots.

PRODUCT INFORMATION:

A. bipunctata are sold in small containers of 100 larvae. They are shipped in shredded paper or other packing material to provide protection.

INTRODUCTION RATES:

Release the *A. bipunctata* upon receipt. If needed, they can be stored in a dark place for 1-2 days at 46°F (8°C) to 50°F (10°C). Place strips of paper with larvae in the center of aphid hotspots.

Adalia bipunctata, Hectonichus / CC BY-SA

Light infestation: Release 5-10 individuals per plant and repeat applications if necessary on infested areas.

High infestation: Release 10-20 individuals per plant and repeat applications if necessary on infested areas.

Trees and bushes: Release a minimum of 200 individuals per 30cm of trunk in the crown of the plant.

FOR BEST RESULTS:

Apply before infestation gets too big, and where infestation is most heavy, apply more of the *A. bipunctata*. Any ants will reduce the ability for *A. bipunctata* to target aphid populations, as the ants may attempt to protect the aphids. Use glue barriers or ant lures to reduce their influence. When food is scarce, cannibalism occurs within *A. bipunctata*.

USING CHEMICALS:

It is essential to refrain from using broad-spectrum chemicals in order to conserve naturally occurring predators and parasites.

For more information, Please contact ***Sound Horticulture***

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