

Insects Are Some of Man's Best Friends

Not all insects are pests; in fact, a great many of them are beneficial to man. Entomologists recognize the good done by beneficial insects as well as the injury done by harmful ones.

Beneficial insects are a safe biological alternative to the use of poisonous chemicals for all of your pest management needs. The use of toxic chemicals is far too pervasive in the world today - chemicals that are harmful to our health, our environment, and our children.

Beneficial insects can be applied in the spring or fall. The pest to be controlled should be present; the insects cannot be used as a preventative measure. The soil temperature should be at least 50-55 degrees F at the time of release. The ground should be kept moist, so water before and after release if no rain has fallen. They are best applied near dusk.

They actually start working within 48 to 72 hours. Using a spade or shovel, turn up the ground where insects were applied to check for dead larvae. Grub larvae will turn brown once infected. Depending on the size of the area and the pest population, total control time varies. Beneficial insects will spread from infected grub/larvae to infected pests during the growing season.

Beneficial insects do not prey on each other and will not attack plants either.

For More Information

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If you would like more information about beneficial insects, contact your local county extension office.



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A Guide to Beneficial Insects

An alternative to using pesticides



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www.deq.idaho.gov





Ladybug Beetles
(*Hippodamia convergens*)



Everyone recognizes the familiar ladybug, or ladybird beetle. Ladybugs can eat over 5000 aphids (or other soft body insects) during their lifetime of about a year. If ladybugs tend to fly away, you can spray their backs with a light soda pop and water spray - it “glues” their wings shut so they can’t fly! It wears off after a week or so. One-half pint is enough for a small garden; a quart covers a larger one. Suitable for use outdoors, in greenhouses and other controlled environment gardens (CEG) situations.

Ladybug beetles should be released in late spring (early April to early-June) depending on what part of the country you live in. The pest(s) to be controlled must be present or the ladybeetles have a tendency to leave in search of other food. The release area should be lightly watered before ladybug beetles are released near dusk.

The purposeful use of an insect to suppress other insects dates back at least to the fourth century A.D. when ants were manipulated to control citrus pests in China.



Whitefly Parasites
(*Encarsia Formosa*)



Tiny whitefly parasites lay their eggs inside developing whitefly pupae, so a whitefly parasite hatches out instead of a whitefly.



Trichogramma Wasps
(*Trichogramma*)
Caterpillar Parasites



Amazing caterpillar parasites control over 200 species of caterpillars, making them the most popular bio-control in the world. They’re so tiny (1/50 of an inch from wingtip to wingtip) you probably won’t even see them. They work by laying their eggs inside moth or butterfly eggs so that, instead of a new generation of caterpillars, another parasite generation hatches out and goes on to repeat the cycle.

Trichogramma can be released throughout the growing season as pests are detected. A good rule of thumb is when you see adults of the pest flying about (usually in the form of a moth or butterfly), they are probably laying eggs.



Praying Mantis
(*Tenodera sinensis*)

The praying mantis is another widely-recognized insect predator. Nymphs and adults alike lie in wait for an unlucky insect which strays too close, then strike out to grab it with their modified front legs. Praying mantis eat anything and everything they can catch.



Green Lacewings
(*Chrysopa rufilabris*)



Use green lacewings against aphids, thrips, mealybugs and whiteflies. Looking like tiny alligators, green lacewing larvae voraciously attack almost any prey they can fit in their mouths. Within 3 or 4 weeks, the larvae hatch into adult green lacewings that feed only on pollen and nectar. Green lacewings are best applied near dusk.



Common Ground Beetle
(*Pterostichus*)

The lowly ground beetle, so common under logs and debris, is another friend of man. Both larvae and adults are predaceous and feed on a wide variety of insects.