

Unusual Beneficial Insects

When most people think of beneficial insects they think of butterflies, bee's, ladybugs, etc. I know I did, or at least until I started researching beneficial insects a bit more. Not only did I realize how many of these bugs I had in my garden, I also realized just how weird some of them are. In this article I will write about some of the weird, albeit beneficial, insects that may be helping your garden, along with how you can help them, and any dangers they pose to you.

Parasitic Wasp

When I first told my brother about these, his first reaction was “ Do they sting?”. The answer is no. They are passive pollinators, the lack of hair on their bodies means they don't carry as much pollen. The real benefit of parasitic wasps, like the most of the insects on this list, comes in their odd form of pest control. The wasp will inject pest such as aphids, tomato hornworm, squash bugs and squash vine borers, and even cucumber beetles with its eggs. These eggs will hatch and eat the pest from the inside out, gross yet effective. They are solitary so you do not have to worry about a colony attacking you, and have no interest in humans. They only seek out insects for the purpose of egg laying, and sometimes food. Most of their food comes from plants in the form of nectar and honeydew. To help this interesting species plant a variety of flowers, personally I noticed ours on everything from sedum to spearmint.



This unfortunate Tomato Hornworm met the Parasitic wasp! The author took this photo.

Assassin Bug

As the name suggests this bug is a rather fierce looking, and acting, predator in the bug world. It feeds on pretty much all insects, but prefers soft bodied insects. A good example is the plump potato beetle larvae, but they also eat aphids and asparagus beetles. The ones in my garden seem to be keeping the potato beetles under control, but let me know if you want updates. They lay tight egg clusters in a variety of places, but not in other insects! I have not been lucky enough to see these egg clusters, unlike the parasitic wasp. They do sometimes eat beneficial insects, and if startled enough might inject you with a toxin, but most likely this will affect you like a bee sting unless you are allergic. This toxin paralyzes prey in the garden. Keep a wide variety of flowers, herbs, vegetables, and even shrubs and small trees to help benefit this insect.



This Assassin Bug picture was found on Wikipedia.

Hoverflies

Without knowing it for a long time, I see this garden insect quite often. They always reminded me of little bees, but they have a much different role in the garden and are a bit more carnivorous. Although very effective pollinators in the adult stage, when in the larval stage they are extremely effective at eating a range of pests such as aphids and mites. When in the larval stage hover flies will eat, give or take, 400 Aphids! Once adults they

feed on nectar and pollen, whilst nesting in a large range of areas. In general these areas are a bit more overgrown, and away from humans. The +/- 6000 species of Hoverfly cannot sting.

Tachinid Fly

This insect originally caught my interest because of its name, and I later learned it lays eggs in its prey much like the parasitic wasp. They lay their eggs on a wide variety of bugs, but caterpillars (which would thereby include butterflies and moths) are a favorite. The larvae then eat the unlucky insects whilst developing. The adults feed on the nectar from flowers, and the honeydew from insects such as aphids. Although eating the honeydew won't directly kill aphids, this action has been shown to increase bacterial growth that will. These flies will live pretty much anywhere with plant life, but the presence of flowers will attract them as it is their food source. Of the breeds in North America today, many were introduced to control invasive species, an interesting example being the *Ormia depleta* brought over from Brazil and released into Florida to control Mole Crickets.



This Tachinid Fly image was found on Wikipedia.

I have mentioned overgrown sections of lawn multiple times, but it does not have to be an ugly section of the yard. A diverse, textured garden bed would be best. These often can look beautiful, and once established don't require as much work as you would think. Adding a plant here, and

mulching a little there really spreads out the workload in a manageable way that also populates the garden. There are a ton of flowers, herbs, shrubs/trees, and vegetables that can play their part in this intricate system. There are really no set rules, so plant what you like, and don't be afraid to try new plants. The key is variety, as wide as a variety you can get