

Beneficial Insects



Summer Tiphia wasps feeding on a wild carrot.



Adult Summer Tiphia Wasp

Parasitoid Wasps

Parasitoid wasps. They are large to microscopically small wasps that lay their eggs inside other insects. After the eggs are laid, their larvae begin to eat the host insect from the inside. They are completely harmless to people. Some parasitoid wasps are the size of yellow jackets, while most are much smaller; the microscopic Trichogrammatidae are the smallest. Trichogrammatids are so tiny that they lay their eggs inside other insect eggs, where their larvae feed and develop. Other parasitoid wasps lay their eggs in caterpillars, aphids, and grubs.

A common sight for most homeowners is the parasitic wasp seen on the tomato/tobacco hornworm. When you see cotton-like "pills" on the outside of a hornworm, it is the result of a parasitoid wasp. What has happened is that a wasp has implanted its eggs into the hornworm. The eggs then develop into larvae, which feed on the inside of the hornworm. When the larvae are ready to pupate, they move to the surface of the insect and form the cottony cocoons that you see.

***Tiphia* Wasps**

We typically do not think of wasps as being beneficial, but *Tiphia* wasps are natural enemies of Japanese beetle grubs. The spring *Tiphia* wasps are active in May and early June. They attack the grubs that have overwintered in our lawns. The summer *Tiphia* wasps, active from August into September, attack grubs by digging into the soil to search for them. Once they find a grub, they sting it and lay an egg on the grub. When the wasp egg hatches, it starts eating the grub.

Tiphia wasps are solitary (they live alone and not in hives or nests) and are approximately 0.5" long. They are black and slender with 2 pairs of wings. The adult wasps depend on nectar and pollen from flowers for food. To encourage spring *Tiphia* wasps in your neighborhood, plant peonies such as 'Big Ben' and 'Festiva Maxima'. The summer *Tiphia* wasps appear to prefer wild carrot, otherwise known as 'Queen Anne's lace'.