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Parasitic Wasps: Encyrtid wasps

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Encyrtids are a group of very small (1/50 to 1/16 inch) parasitoids, which are important in biological control in agriculture suppressing scale insects and mealybugs. Other species attack beetles, flies, caterpillars, grasshoppers, true bugs and other wasps. There are more than 300 species of encyrtid wasps in the US and every garden likely harbors some populations of these ubiquitous pest control agents.

Prey or Pest Targeted

~ Aphids, mealybugs, caterpillars, true bugs, beetles, grasshoppers, leafhoppers, spiders, whiteflies, insect eggs

Attracting and Keeping Beneficial Insects in Your Yard

- ~ Avoid regular use of synthetic, broad-spectrum pesticides. Infrequent use of certain narrow-spectrum pesticides is more compatible with some beneficials but generally the less chemical inputs there are, the greater and more diverse the beneficial insect community will be. Extensive lawns are also not conducive to attracting and retaining a diversity of beneficial insects, mites and spiders. Minimize lawn areas and maximize shrub and bush plantings. Many beneficials reside naturally in riparian and other 'natural' areas near to many back yards. Natural dispersion from these refuges ensures that some beneficials will visit back yards but they will not stay unless food, host and shelter resources are available. Native plants have closer affinities with native insects and therefore provide most of these resources. A garden with a good diversity of local native flora in and around back yards, will improve the abundance and diversity of local, beneficial arthropods. Native flora also provides natural overwintering sites for many beneficial insects and it is useful to leave at least a small area of native vegetation undisturbed during fall and winter.
- ~ Some kinds of beneficial insects (e.g. lady beetles, lacewings, predatory mites) are available for purchase from commercial suppliers. However, benefits from introducing these beneficials are usually limited and short-lived. Upon release, commercially obtained lady beetles and lacewings often disperse and may rapidly leave your backyard despite the presence of prey and suitable nectar resources. Generally, it is more effective and sustainable to create a garden habitat that will be colonized by beneficials naturally.

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Images



~ Caption: Encyrtid wasp (*Metaphycus* sp.)
(Encyrtidae)
~ Photo by: D.G. James