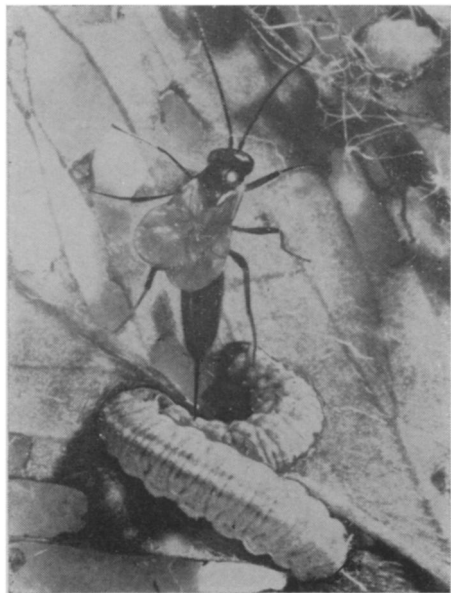


# Nature Note

## Weevil Killer

A little wasp is being shipped in great quantities to the East Coast to help destroy a destructive beetle. It is only about one-eighth of an inch long,



Agriculture

but farmers from Georgia to Massachusetts hope it will help rid their alfalfa fields of the pesty weevil.

The wasp, *Bathyplectes curculionis*, is one of the parasitic members belonging to the Hymenoptera order—a large group of insects with thin membranous wings including ants, bees, hornets and wasps. The wasp family usually has a slender smooth body with the abdomen attached to the thorax by a thin stalk, and biting mouthparts. The females and workers often have a formidable sting.

In its war against the alfalfa weevil, the tiny *Bathyplectes* female deposits her eggs within the weevils' caterpillar-like larvae. (Many insects go through four stages of metamorphosis or change in their life cycle: egg, larva, pupa or cocoon stage, and finally adult insect.) After a while, the wasp eggs hatch into larvae that begin feeding upon the host larvae. The pesty weevil, however, is not killed until after its larva stage is finished and it has spun a cocoon, and entered the pupa stage. The parasite thus produces no dramatic results the

first year, but lessens damage to alfalfa the next year by reducing the potential weevil population.

Wasps are often much maligned, much misunderstood creatures, and have needlessly been killed by people ignorant of their value. Many wasps have been extremely valuable to mankind by hunting and killing destructive insects such as leafhoppers, stink bugs, flying ants, aphids, cotton leafworms, bollworms, codling moths, sugarcane borers, Japanese beetles and even tsetse flies. Wasps sometimes have been propagated by the millions and released throughout infected fields and groves to kill these pests.

With more than 20,000 species, many wasps are solitary and construct their single nests or cells in which they lay their eggs. They provision these nests with specific insects that they have permanently paralyzed, but not killed. This way a fresh supply of food is available for the growing young wasp larva when it hatches from the egg—and a few less pests survive to plague the world.

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