

Beneficial Insects Sheet 3 ¹

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- **Brown lacewings** (Plate 1). These insects resemble green lacewings but are brownish, smaller and less common. The transparent wings have many veins, which gives them the name lacewings. There are 58 North American species. Most larvae are elongate, soft-bodied, active and have sickle-shaped mandibles (Plate 2). Some species cover themselves with the skins of their victims and other debris, thus the name trash bug (Plate 3).
- **Ambush bugs** (Plate 4). These insects are closely related to assassin bugs and are small, stout-bodied bugs 1/4" to 1/2" long. There are 22 species in North America. Their front legs are thickened for grasping their prey. They wait on flowers, where they are camouflaged by their greenish-yellow and brown body color. They feed mainly on wasps and flies.
- **Dragonflies** (Plate 5). Also known as mosquito hawks, dragonflies have a wingspan of 1" to 4-1/2", depending on the species. Adults and nymphs are predaceous. They are especially effective in reducing populations of mosquitoes and other aquatic flies. The nymphs live in ponds and streams and prey on mosquito larvae, while the adults catch mosquitoes on the wing.
- **Damselflies** (Plate 6). These slender, delicate insects are 1" to 2" long. Like dragonflies, both adults and nymphs are predaceous. The nymphs live in the water, feeding mainly on the larvae of aquatic insects such as mosquitoes and midges.
- **Paper wasps** (Plate 7). These are very common in Florida. Their nest consists of a single circular tier of cells attached by a short stalk to the underside of some surface. The nests are usually located on the eaves of a building, ceiling of a porch, or similar surface. They prey mainly on caterpillars, which they sting and paralyze, then chew up and feed to the developing larvae.
- **Earwigs** (Plate 8). Many earwigs, especially the striped earwig, prey upon insects such as chinch bugs, small mole crickets, sod webworms and other insects that live on the soil surface. This large species is 3/4" to 1" long and brown, with longitudinal dark stripes on the thorax and wings. In laboratory experiments this earwig commonly consumed 50 chinch bugs a day.

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• **Long-legged flies** (Plate 9). These flies are about 1/4" long and are metallic green, blue or copper-colored. There are about 1,250 North American species, and they are usually abundant near woodland swamps and streams. Adults and larvae are predaceous.

• **Predaceous mites** (Plate 10). Some mites, especially the phytoseids, prey upon spider mites, small insects and eggs. These large, active mites are about 1/25" long and are orange to brown. In Europe, and to some extent in the United States, predaceous mites are reared and released in greenhouses to reduce plant-feeding mite populations.



Plate 1 .



Plate 2 .



Plate 3 .



Plate 4 .



Plate 5 .



Plate 6 .



Plate 7 .



Plate 8 .



Plate 9 .



Plate 10 .