Common Pests and Natural Enemies

APHIDS



Aphids or "plant lice" are soft bodied insects usually less than 1/8 inch long. There are approximately 1,375 different species of aphids in the United States and Canada. Their color varies but most are green, yellow or black. Aphids are found on numerous

kinds of plants, usually on stems and the undersides of leaves. They have piercing sucking mouthparts and their feeding typically causes leaf curling or crinkling. Feeding and the resulting excretion of honeydew can result in the growth of black sooty mold. Several species of aphids transmit damaging plant viruses. Aphids reproduce rapidly and can produce many generations per year.

NATURAL ENEMIES

Predators

Minute pirate bugs Earwigs Assassin bugs Big-eyed bugs Ground beetles Lady beetles Parasites
Syrphid flies
Aphelinidae wasps
Brachonid wasps

Pathogens

Beauveria fungus Neozygites fungus



BEETLES



More than 350,000 species of beetles have been described and they vary greatly in size, shape and color. Both larval and adult beetles can be phytophagous (plant eating) and some are considered pests, whereas others are beneficial in that they are predators of

pests. Many beetles also aid in pollination. All have complete metamorphosis: egg, several larval instars (sizes), pupae and adult.

NATURAL ENEMIES

Predators

Minute pirate bugs
Predatory stink bug s
Syrphid flies
Assassin bugs
Ground beetles
Big-eyed bugs
Lacewings

Parasites

Wasps Flies



CATERPILLARS



The larval stage of a butterfly or moth is known as a caterpillar. A majority of caterpillars are plant eaters and their populations on plants should be monitored to prevent outbreaks. There are an estimated 160,000 named species

in this order of insects and a few of them can cause extensive damage to crops and ornamental plants. Most pest caterpillars develop into moths but many become butterflies.

NATURAL ENEMIES

Predators

Birds
Ground beetles
Fire ants
Minute pirate bugs

Parasites

Tiphia wasp *Pelecinus* fly *Heterorhabditis* nematodes

Pathogens

Cordyceps fungus





nmon Pesis and Natural Enem

CHINCH BUGS



turfgrass. They reside in the thatch layer and generally feed on the lower leaf sheath and crown area. The southern chinch bug is the most damaging insect pest of St. Augustine-grass in Florida. When chinch bugs reach sufficient numbers, they can cause large irregular

Chinch bugs (3.5-6mm) suck the sap of

brown patches in lawns.

NATURAL ENEMIES

Predators

Minute Pirate bug Big-eved bugs **Ground Beetles Spiders Earwigs** Fire ants

Parasites Scelionid wasp



GRASSHOPPERS



Grasshoppers are common insects in Florida pastures and natural areas. They can cause significant damage to agronomic crops and landscapes. Adults tend to reside in trees, while immature stages feed on grasses and other broadleaf

plants. Damage is generally the result of feeding by high densities common in the southeast.

NATURAL ENEMIES

Predators

Robber flies Birds **Blister Beetles Spiders**

Parasites

Tachinid flies

Pathogens

Beauveria fungus Nosema sp.

GRUBS



The term "grub" is typically applied to the larval stage of beetles in several different families. The white grub in this photograph is the larva of the common June beetle. These grubs can cause damage in turf if they reach high

densities in the soil. The beetles emerge during the summer months.

NATURAL ENEMIES

Predators

Birds Ground beetles Fire ants

Parasites

Pelecinus fly Tiphia wasp Heterorhabditis nematodes

Pathogens

Cordyceps fungus

LACE BUGS



Lace bugs are less than 1cm long and often have transparent wings. There are many different species of lace bugs but the most common ones damage ornamental plants. Lace bugs usually are found on the undersides of leaves

where their feeding causes stippling.

NATURAL ENEMIES

Predators

Assassin bugs Predatory thrips Lady beetles Lacewings

Predatory mites





