INSECT MOUTHPARTS



Aphid showing stylets inserted into plant tissue.

Insects and mites have different mouthparts, depending on the group to which they belong. Some have mouthparts that cannot cause damage to your plants. For example, moths and butterflies have coiled mouthparts that are designed to suck nectar and fluids from flowers. Determining the type of mouthpart present on a specimen is useful for identifying it, and evaluating its damage potential. About 90% of the insect damage in your greenhouse is caused by insects with either piercing and sucking or chewing mouthparts. Insects with piercing and sucking mouthparts are often also able to transmit viruses.

Insects with piercing and sucking mouthparts have slender needlelike stylets to pierce the plant cell and suck up plant sap and the fluid inside cells. Aphids, thrips, mites and true bugs have piercing and sucking mouthparts or slightly modified ones.

Insects with chewing mouthparts have mandibles that are jaw-like structures with teeth. They tear off and chew plant tissue or tunnel within stems or between leaf tissues. Caterpillars and beetles have this type of mouthparts.