We're continually emphasizing the importance of monitoring and the use of yellow sticky cards for the successful implementation of IPM - it is essential to know the identity and location of your pest species so that you can control them. To help you identify the insects which are attracted to your yellow sticky reaps, we adapted the following article by Dr. James Baker, with his permission, from the North Carolina Flower Growers Bulletin, Vol. 30(1), Feb. 1986.

IDENTIFYING INSECTS ON YOUR STICKY CARDS

Dr. James R. Baker, Extension Entomologist, North Carolina State University, Raleigh, N.C.

Correctly identifying the most common insects on your sticky traps will help you to choose the correct control strategy. Species that resemble small, dark flies, such as shore flies, fungus gnats, and leaf miners, require very different controls; whiteflies may be confused with thrips; and aphids also have winged forms that are attracted to yellow sticky cards.

To get serious about differentiating small insects which are gummed up in adhesive, you will need some magnification. A 10X handlens works well and is relatively inexpensive.

When insects alight on a yellow sticky card, they immediately struggle and and become ensnared in the adhesive, often in awkward positions. However, the wings are either free of the adhesive or glued down securely. This is important as the wings are useful for identification. The antennae or feelers on the head of the insect are also important, but these are so fragile that they often break off or are damaged. The diagram on the reverse side provides some of the broad diagnostic features to look. for.

Don't forget to have a supply of some waterless hand cleanser nearby to remove any of the adhesive (a polybutene-naphtha inert rubber polymer which remains viscous for long periods) from your hands (or hair) following scouting and examination of the cards.

APHIDS. The wings of aphids often settle symmetrically into the adhesive to either side of the body. Sometime trapped aphids give birth to 1-5 nymphs before they die and their bodies shrivel up; after only a few days only parts of the aphid can be recognized. The front wings usually have two parallel veins close to the outer or front edge. These veins end at a dark, skinny part. The legs and antennae of aphids are long and thin.

FUNGUS GNATS. Fungus gnats are small, dark, mosquito-like insects with gray wings. The wing has a distinct, Y-shaped vein at the tip. Fungus gnats have relatively long, skinny legs and antennae.

LEAFMINERS. Leafminer adults are shaped like eye gnats. Unless the specimen is completely mired up in the adhesive, it is possible to see a conspicuous yellow spot on each side of the body. Leafminer flies have short antennae and moderately long legs.

PARASITIC WASPS. There may be few on your traps even before the release of specific beneficial species. Parasitic wasps usually have antennae with elbows like an ant, and the forewings have only one vein which zigs toward the front margin and zags away. Usually parasitic wasps are more pointed at the rear than flies.

SHORE FLIES. Shore flies are the largest common fly found on sticky traps (occasionally a house fly or horse fly may get stuck). Shore flies are about the size of the "drunkards" (fruit flies) which are attracted to sliced tomatoes in summer, but shore flies are dark with dark eyes, legs and wings. They have pale spots on their wings; short antennae, and moderately long legs.

THRIPS. Thrips are the tiniest insects you will find in any numbers on sticky cards. Thrips evidently are serene insects because they seem to fold their wings over their abdomens with aplomb before sinking into the adhesive (no struggle, no undignified posture for thrips). Consequently most specimens appear spindle-shaped with the wings protruding neatly at the rear. If you look closely enough (watch out for adhesive in your hair), you will, on some specimens, see the hairs that line the edges of the wings. Often the stocky antennae protrude in a V-shape at the front.

WHITEFLIES. Whiteflies lose their white, waxy bloom as they are entrapped by the adhesive. The insect shows its true orange color and its fragile nature when trapped. Whiteflies are only a little larger than thrips. Usually enough of a wing or leg or other part protrudes above the adhesive so that the white bloom there reveals the identity of the whitefly. Whiteflies tend to disappear into the morass after only a few days in the adhesive.

MISCELLANEOUS. There are about a million different kinds of insects. Should you not be able to identify all the insects on your sticky cards do not despair. Hopefully the above information will help you to identify the most common and most important. If not, or if you find large numbers of an unidentified specimen, seek the assistance of your local co-operative extension agent, crop specialist, or your crop consultant.

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Remember to check and replace your yellow sticky cards regularly. Too many insects on the card makes counting and identification impossible. Regular semi-weekly or weekly scouting of sticky cards and plants are essential pest monitoring practices. - Anne Frodsham

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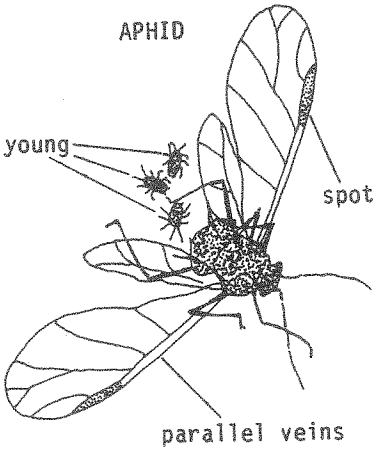
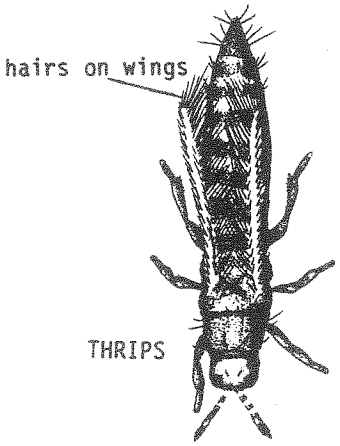
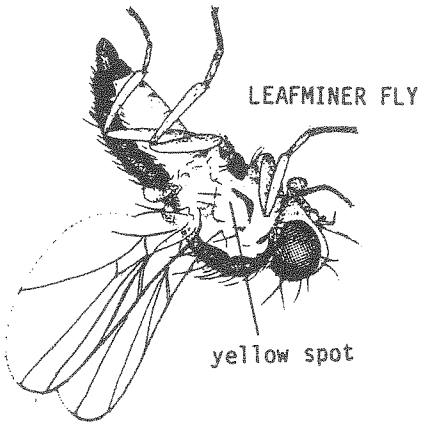
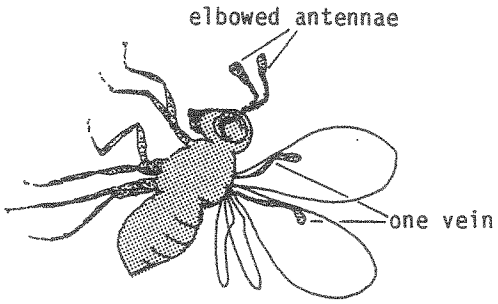
Insects On Sticky Traps

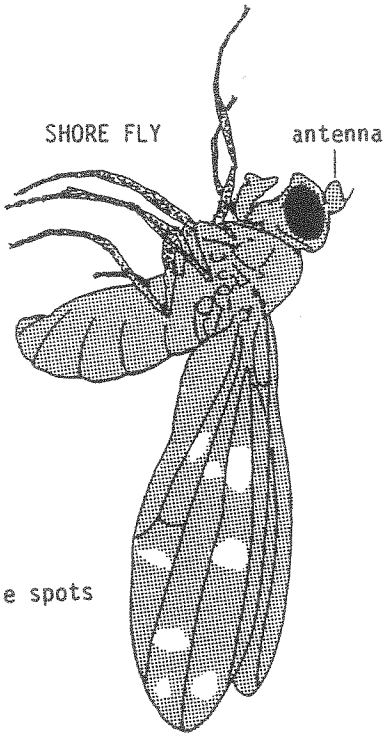


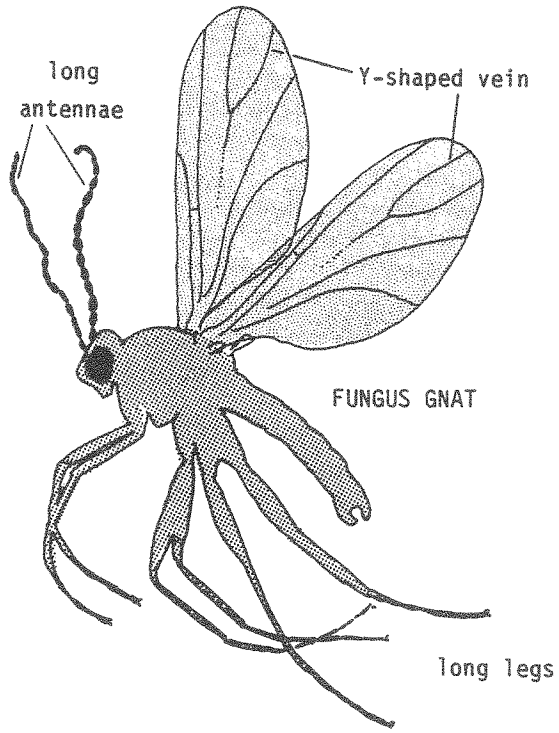


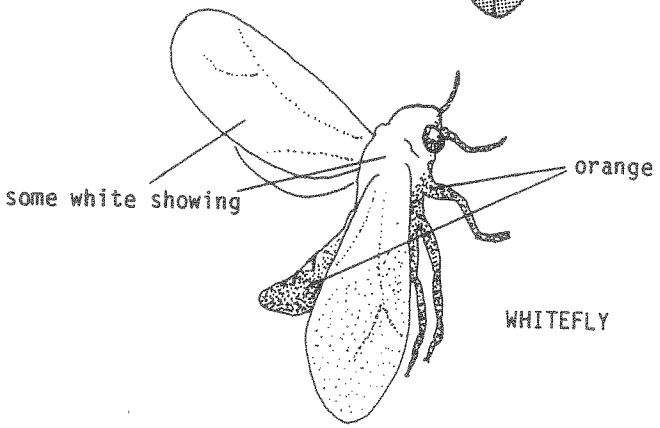




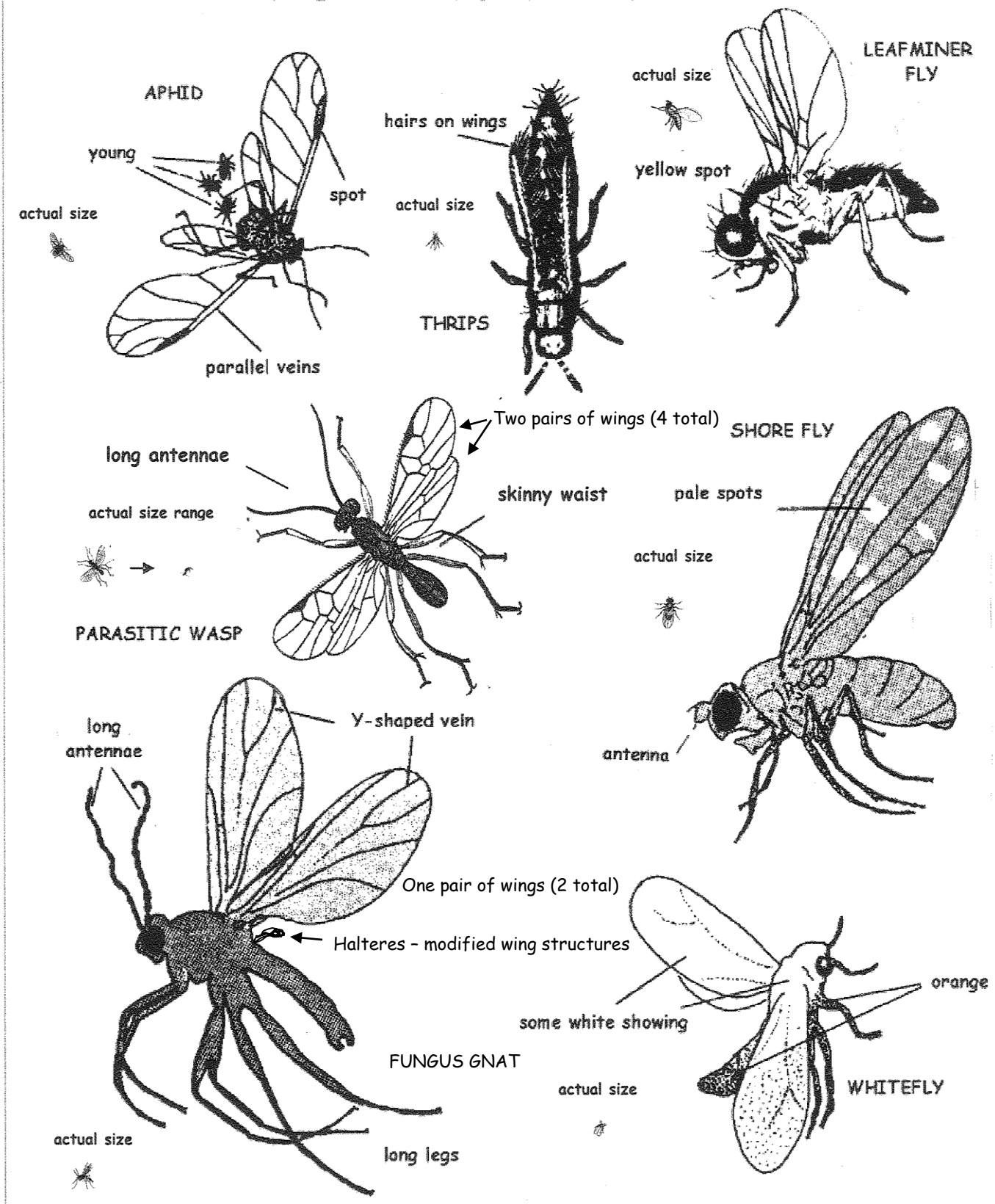
PARASITIC WASP







INSECTS FOUND ON STICKY TRAPS



Adapted by C. Frank & M. Skinner. Modified 2019. Univ. of VT Entomology Lab.
Original by Steve Bambara et al. 2003. NC Coop. Ext. Service.