

## PINNING AND LABELING INSECTS FOR KANSAS 4-H ENTOMOLOGY COLLECTIONS

The preferred way to display and study adult insects is to pin them into display boxes using special insect pins. The pins are pushed through the thorax of the insects while they are still fresh and the legs and antennae are placed in a natural position. This allows the specimens to be handled and studied without damaging them.

In pinning insects always use special insect mounting pins that are specially treated to resist rusting. Insect pins vary in size from 000 to number 8. The latter is the largest in diameter. Numbers 2 and 3 usually work the best for the amateur collector.

A good rule is to pin the insect slightly to the right side of the middle and down through the area where the middle pair of legs is attached. Styrofoam is an excellent base for positioning the legs so they will dry in the correct position. These is a slight variation in the pinning of the different kinds of insects. (Fig. 1).

### Correct Pinning Important

To do a nice job of pinning insects will require some practice. All insects must be pinned so that they are straight on the pins. Do not tilt the specimens on the pin. The height of the specimen on the pin will depend somewhat on the size of the insect; however, always keep the distances from the top of the insect's body to the head of the pin the same. Usually 1/3 of the pin should be above the upper surface of the insect; this will allow enough room to permit handling specimens without actually touching them.

Specimens should be handled carefully to keep all legs and antennae. A small amount of time spent positioning the legs and antennae will dress up the collection. Insect specimens can be kept for long periods of time. Many of the specimens in university collections are nearly 100 years old.

### Labeling Your Specimens

By using your pinning block, you can also properly space the labels that go on the pin (beneath the insect specimen). (Fig. 8.) The label nearest the insect gives the common name. The second label gives the scientific name. All labels should be of uniform size, white in color, and the information typewritten or printed neatly.

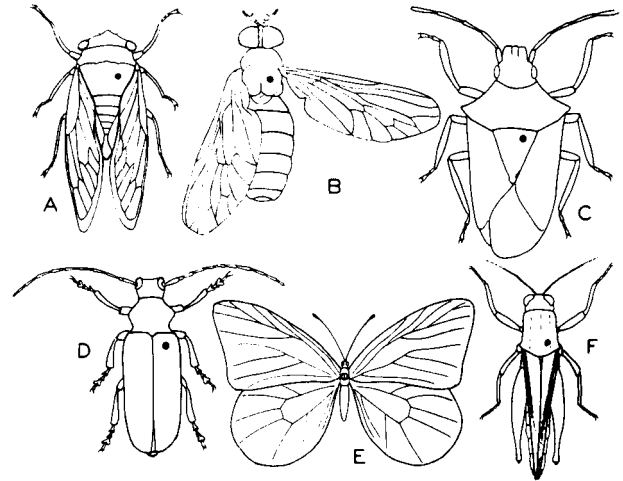


Figure 1. Correct place to pin several orders of insects. The small round dot in the thorax indicates the position of the pin. A: Homoptera,

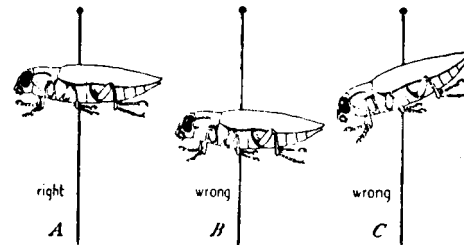


Figure 2. Illustration of right and wrong methods of pinning insects. A: Correct Height and position for specimen, B: Insect too low on the pin, C: Insect tilted on the pin.

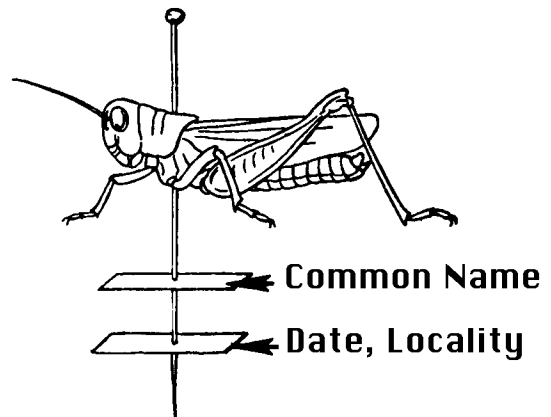


Figure 3. Illustration of labels on pin.

## Pinning Blocks

The appearance of a collection of insects is important if all the specimens and labels are placed at a uniform height on the pins. This is easily done by using a wooden pinning block. The pinning block (see Fig. 6) may be made from a piece of soft wood or styrofoam 1 inch square and 4 inches long, cut into four steps which are 1/4, 1/2, 3/4 and 1 inch in height. Or it can be made by fastening together four pieces of 1/4 inch plywood 4, 3, 2 and 1 inches in length. In each step a small hole is drilled. After the insect is placed upon a pin, either the head or the point of the pin may be placed in the desired hole and the insect specimen or label adjusted to the right height.

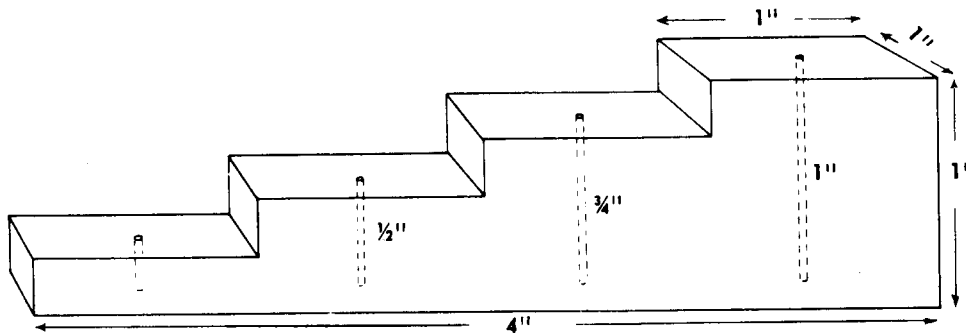


Figure 4. Pinning Block

## Pinning Small Insects

Many of the smaller insects cannot be pinned directly through the body with regular insect pins. These should be mounted on card points (Fig. 5). Card points are slender triangles of paper. These triangles are pinned through the broad end with a regular insect pin and the insect is glued to the narrow point. Card points may be obtained by writing to Extension Entomologist, Kansas State University.

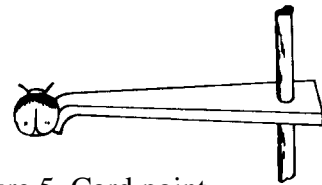


Figure 5. Card point.

## Preserving Soft-bodied Insects

Some species of insects (such as aphids and lice) cannot be preserved well by pinning. These insects should be preserved by placing them directly into a preserving fluid.

Seventy percent ethyl alcohol is generally used -- rubbing alcohol is also acceptable. Small vials or bottles are used for this purpose. These may be purchased at drug stores or supply houses. Fasten the vials containing the immature insects in the collecting box with scotch tape and a pin with labels placed in the cork.

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(Publication Adapted from 4-H Entomology, Dell Gates, 1981, Kansas State Cooperative Extension Service)



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