



TEXAS TECH UNIVERSITY

Museum of Texas Tech University

INVERTEBRATE ZOOLOGY COLLECTION

General guide for specimen preparation

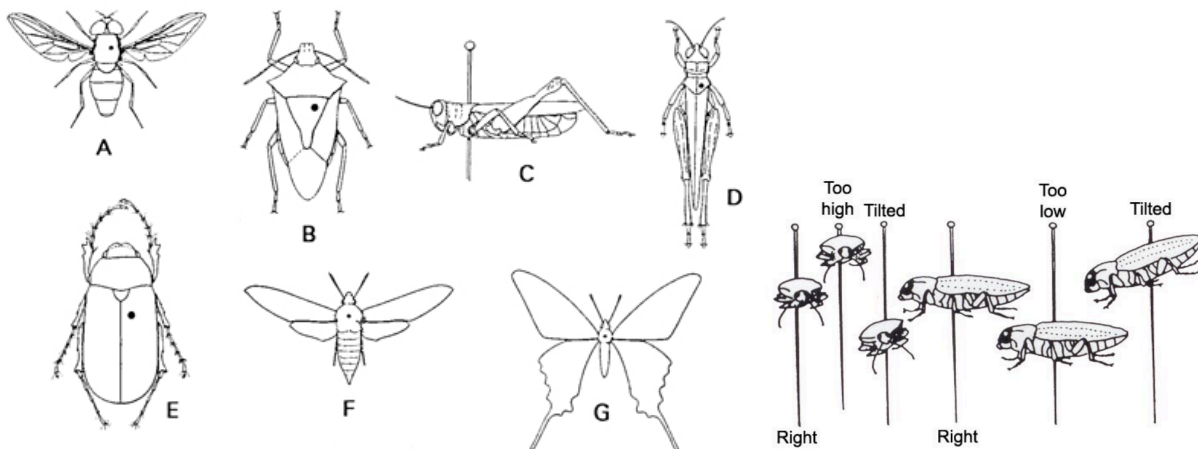
By Dr. Jennifer C. Girón, 2022

Jennifer.Giron@ttu.edu

The main goal of preparing specimens is to make them available for study, in good condition, **for a very long time**. There are different preservation methods for invertebrates that depend on the taxonomic group. However, most insect specimens are either mounted dry on pins or point-mounted (glued onto a pinned pre-cut piece of cardstock).

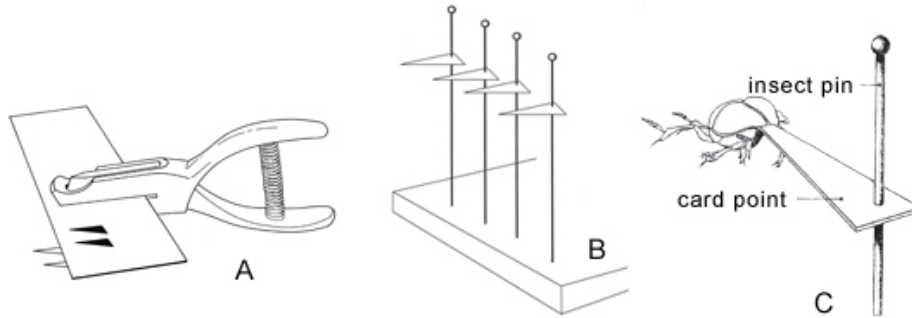
General rules of thumb:

1. NEVER leave specimens unlabeled.
2. Temporary labels must be COMPLETE labels.
3. Insects should be pinned on the right side of the thorax and as straight on the pin as possible:



4. Do not pin specimens smaller than 1 cm directly, even less with fine pins, as these mounts are VERY fragile, and the specimens can break easily, just by trying to pin through labels. Specimens smaller than 1 cm should be point-mounted by gluing the

specimen on the right side of the thorax onto the point. To facilitate this process, cut off the very tip of the point, so that you have a wider surface to work with, and fold it down using forceps. For this kind of mount, pins #2 or #3 are recommended since they are sturdier.

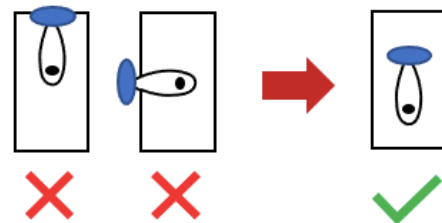


5. All labels should be aligned and in the same orientation, separated from each other, so that all the labels are readable in the same view, without having to move them or take them off. Where to pin the label is going to depend on how the specimen is mounted:

- a. **Pinned specimens:** labels should be centered, so that the labels align with the specimen without leaving too much space on one side.



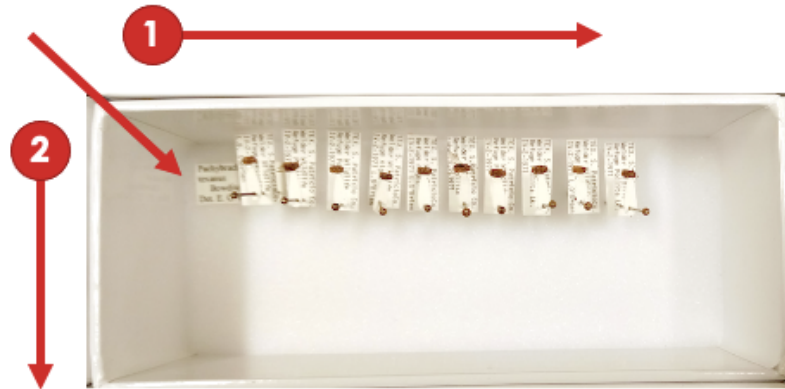
- b. **Point-mounted specimens:** Off to the right side of the label. For small specimens, labels act as additional protection.



Note: When pinning through labels, try to pin through blank spaces and not through letters, since breaking letters might cause readability issues.

6. When organizing specimens in unit trays:

- a. Check for correct orientation of unit tray, especially when they are nearly square.
- b. Start from the top left corner, making rows towards the right (1). Add more rows below as necessary (2).



- c. The **first identification label** in a unit tray should be placed sideways so that it is readable from the top.

7. When organizing unit trays within a drawer start from the top left corner, making columns in alphabetical order by identification (1). Add more columns to the right as necessary (2).



LABELS

Specimens should have locality labels at ALL times: when freshly collected, when mounted, when fully prepared. A specimen without data lacks scientific value.

When mounting long series of specimens from the same locality, if there are no printed labels available, a temporary label can be handwritten, but it is important that this label is COMPLETE.

Information for a complete locality label:

Country, State, County

Locality, coordinates (if available)

Collecting date; habitat / substrate/ plant

Collector

Example:

United States, Texas, Culberson Co.

McKittrick Canyon, Guadalupe N. P.;

31.977630, -104.752806

15-VIII-1977. Leg. D. D. Ralston

Recommendation: Use Roman numerals or the three first letters to indicate the month, since numbers lower than 12 can be easily misinterpreted.

Labels should be laser-printed in acid-free cardstock. Usually font letter #4, either Arial or Times New Roman, is small enough to be readable and save space.

Identification labels contain the taxon name and the name of the person who identified the specimens, along with the date (at least the year) when the identification was made.

Example:

Compsus auricephalus (Say, 1824)

Jennifer Girón, 2020