Honors Biology: Summer Project

Insect Collection:

The first six weeks project in Honors Biology is to collect and identify some common insects found in Central Texas. I am going to include the rubric used to grade the collection and methods used to pin and mount the insects. Your task this summer is to collect, pin, and mount 35 different insects. We will identify the insects in class and determine how many orders you still need to complete the collection. You will receive a lab grade for having your insects. The 35 insects are due on the 1st Friday of the new school year.

Name: _____

Rubric For Insect Collection

Required Components	Points Possible	Points Earned
Number of Identified Insects 35 insects should be classified by their Order, Common name, Family, Genus, and species.	35	
Number of Insect Orders 12 different orders should be represented in your collection.	35	
Arrangement of Insects You should number and arrange your insects according to the handout listing the Orders of Insects (Thysanura > Hymenoptera)	15	
Key The insect key should be typed. Make sure your insect matches the number on your key to the number of the insect. The key should include the Order, Common name, Family, Genus, and species.	15	
Bonus points For each extra order represented (2pts/ extra order)	10	
Total Points	110	

Orders of Insects

Twelve orders of insects should be represented in your collection out of the following:

Thysanura	Ephemeroptera	Odonata	Blattodea	Isoptera	Mantodea
Dermaptera					
Plecoptera	Orthoptera	Phasmida	Mallophaga	Anaplura	Hemiptera
Homoptera					
Coleoptera	Mecoptera	Neuroptera	Trichoptera	Lepidoptera	Diptera
Siphonaptera					
Hymenoptera					

Google each order to find what insects are included.

VI. Methods of Pinning and Mounting Insects

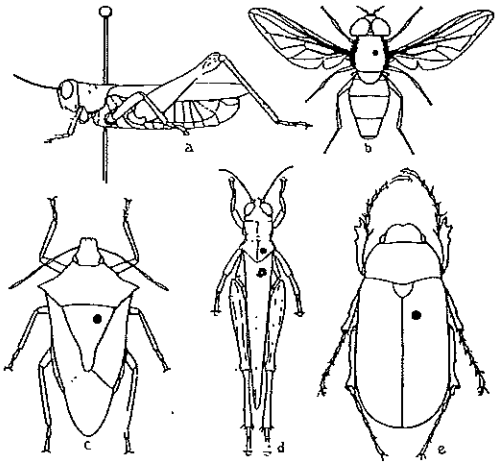


Fig. 624. Methods of pinning insects. A, specimen in lateral view showing method of pinning grasshoppers; the black spots in the other figures show the location of the pin in the case of flies (B), bugs (C), grasshoppers (D), and beetles (E). (Courtesy of the Illinois Natural History Survey.)

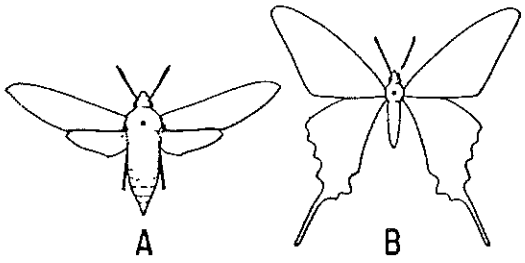
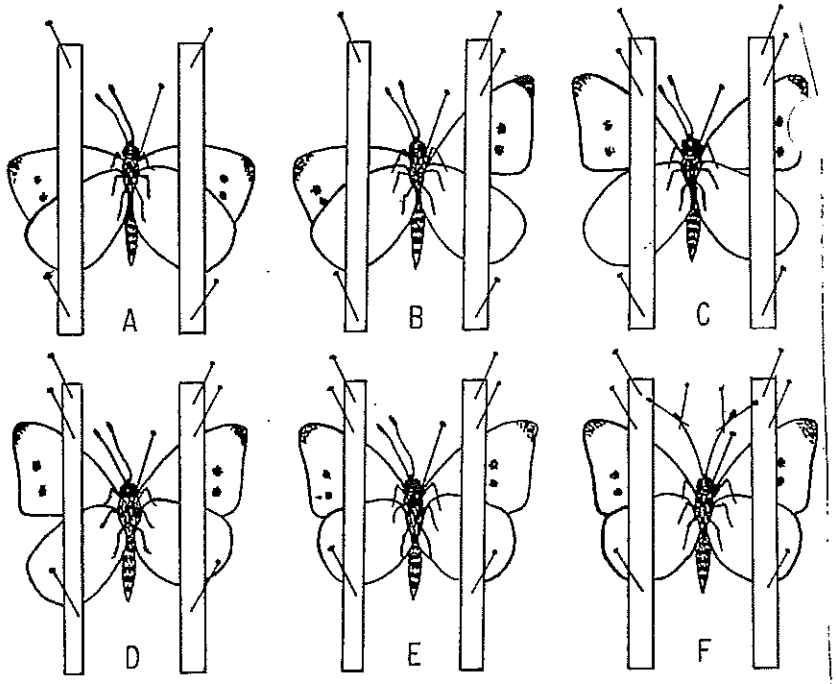


Fig. 625. Method of pinning Lepidoptera. These insects are pinned through the center of the thorax, in both moths (A) and butterflies (B). (Courtesy of the Illinois Natural History Survey.)



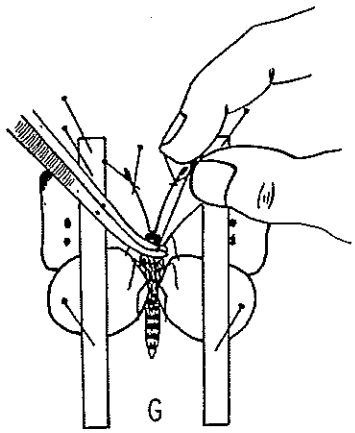


Fig. 628. Steps in spreading a butterfly upside down on a flat surface. A, position before startin to raise the wings; B, front wing on one side raised; C, front wing on the other side raised, with hin margin of front wings in a straight line; D, hind wing on one side raised; E, hind wing on the othe side raised; F, antennae oriented and held in position by pins; G, removing the pin from the bod of the butterfly.

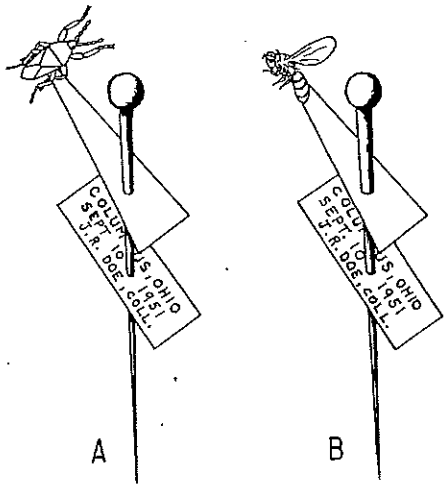


Fig. 629. Methods of mounting minute insects. A, bug on point, ... side up;

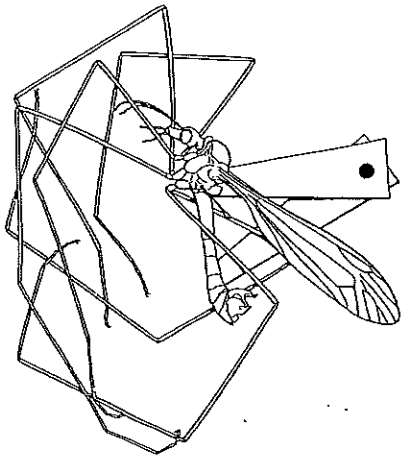


Fig. 630. Method of mounting crane flies and other insects that are elongate and too small to pin. These