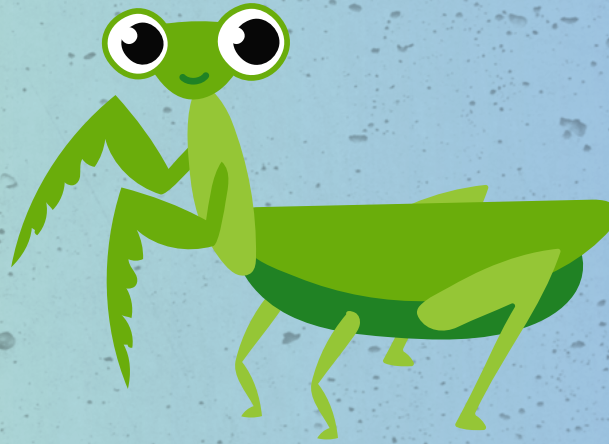


# AGRONOMY INSECT STUDY GUIDE



(Revised 2025)

## Procedures

### **A. Identification - 240 points (48 Specimens at 5 points each)**

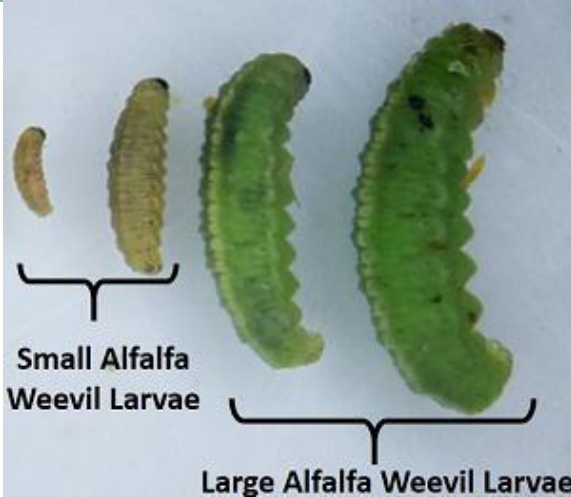
Students will identify 20 plant specimens, 20 seed specimens, and 8 farm equipment specimens. Ideally, the plants should be live specimens and can represent any stage of development. However, they could be press mounts or photographs. Plant specimens should be equally divided between crop and weed plants. Each seed specimen must be real seed, no photographs of seeds. Seed specimens should be equally divided between crop and weed seeds. Specimens can only come from the ID list's provided. Each specimen will be worth five points.

### **B. Placing Classes- 150 points (3 Classes at 50 points each)**

There will be three placing classes each having four samples. Students will rank the four samples in proper order based on quality, uniformity, and shelf life of each sample. One class will be representative of each of the following categories; grain crops (seed samples), forage crops (loose or baled hay or green chop), and fruit or vegetable crops (fruits, berries, leaves, tubers etc). Class specimens will only be chosen from the provided "Crops ID List".

### **C. Insect Identification - 120 points (5 specimens totaling 24 points each)**

This component will consist of identifying insects. Additionally students will have to identify characteristics related to the individual insect. Students will identify five insects (8 points each) along with the following characteristics for each insect identified: Life cycle of each specimen (8 points each), and Mouth part of each specimen (8 points each).



ID # :

400

Common Name:

# ALFALFA WEEVIL

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

401

Common Name:

# APHIDS

Class:

**INSECTA**

Order:

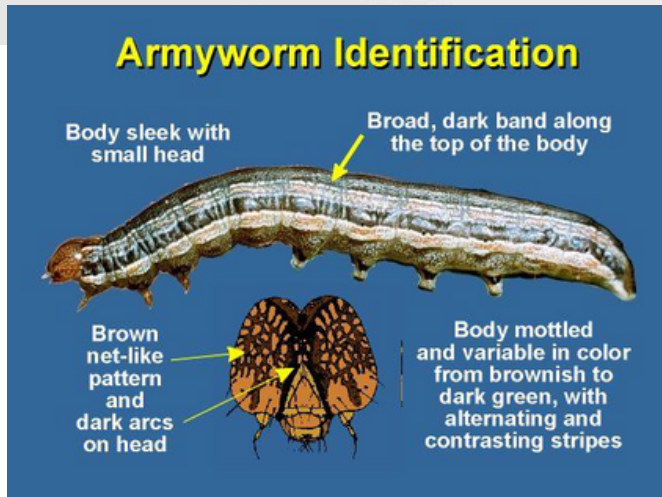
**HOMOPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

402

Common Name:

# ARMYWORM

Class:

**INSECTA**

Order:

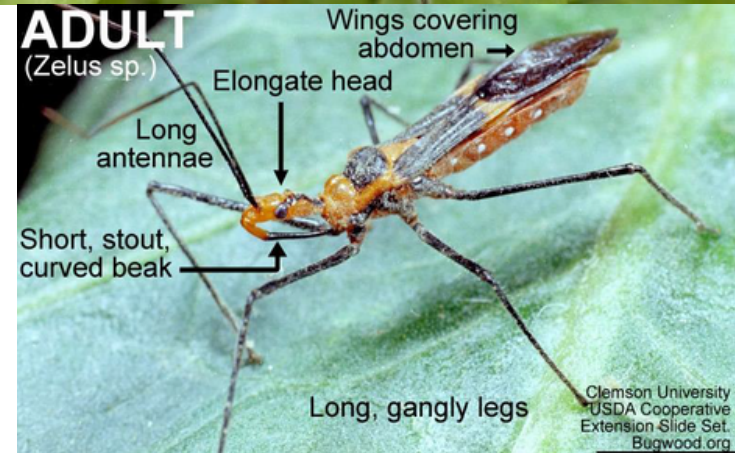
**LEPIDOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

403

Common Name:

# ASSASSIN BUG

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

404

Common Name:

# BEAN WEEVIL

Class:

**INSECTA**

Order:

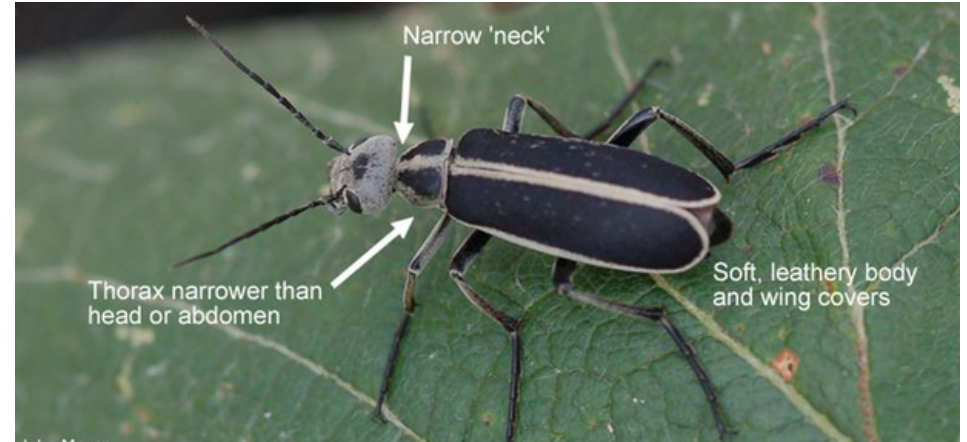
**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

405

Common Name:

# BLISTER BEETLE

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

406

Common Name:

**BOLL WEEVIL**

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

408

Common Name:

**COLORADO POTATO BEETLE**

Class:

**INSECTA**

Order:

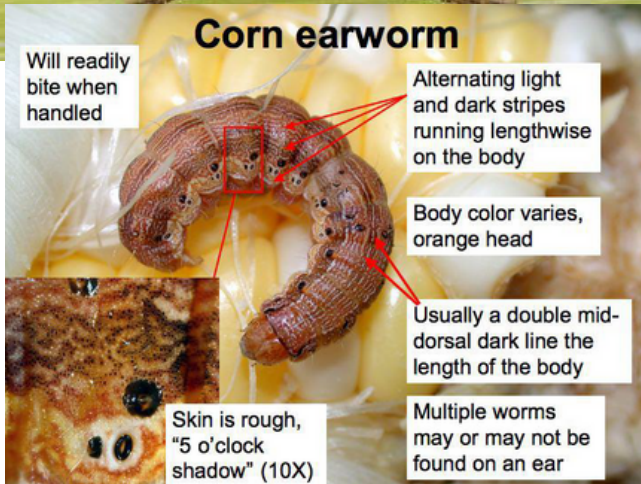
**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



**ID # :**

**409**

**Common Name:**

# **CORN EARWORM**

**Class:**

**INSECTA**

**Order:**

**LEPIDOPTERA**

**Metamorphosis:**

**COMPLETE**

**Mouthparts:**

**CHEWING**



**ID # :**

**410**

**Common Name:**

# **CRICKET**

**Class:**

**INSECTA**

**Order:**

**ORTHOPTERA**

**Metamorphosis:**

**SIMPLE**

**Mouthparts:**

**CHEWING**



ID # :

Common Name:

# 411 CUCUMBER BEETLE

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

Common Name:

# 412 EUROPEAN CORN BORER

Class:

**INSECTA**

Order:

**LEPIDOPTERA**

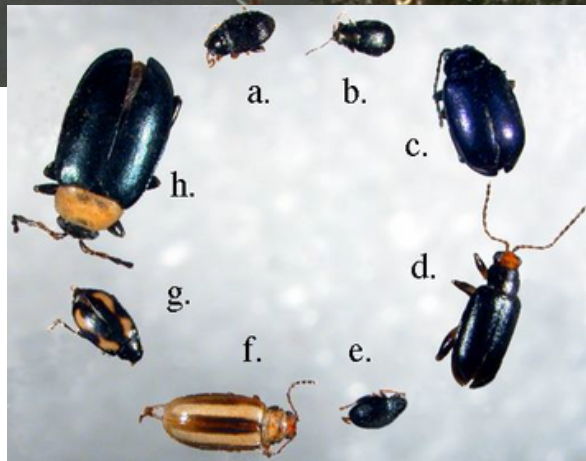
Metamorphosis:

**COMPLETE**

Mouthparts:

**COMBINATION**





**ID # :**

**413**

**Common Name:**

# FLEA BEETLE

**Class:**

**INSECTA**

**Order:**

**COLEOPTERA**

**Metamorphosis:**

**COMPLETE**

**Mouthparts:**

**CHEWING**



**ID # :**

**414**

**Common Name:**

# GRASSHOPPERS

**Class:**

**INSECTA**

**Order:**

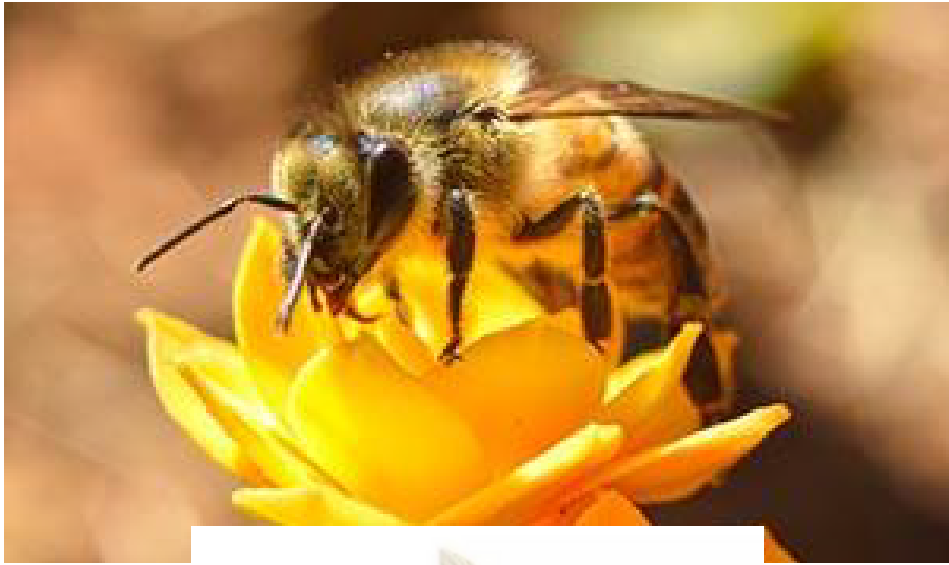
**ORTHOPTERA**

**Metamorphosis:**

**SIMPLE**

**Mouthparts:**

**CHEWING**



ID # :

415

Common Name:

**HONEY BEE**

Class:

**INSECTA**

Order:

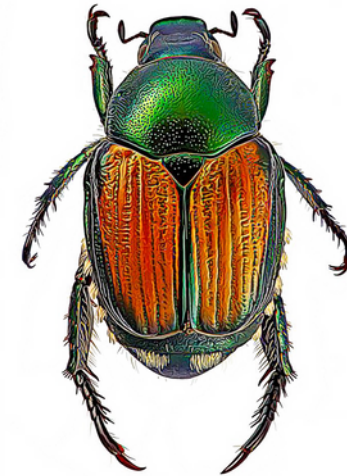
**HYMENOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

416

Common Name:

**JAPANESE BEETLE**

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

417

Common Name:

**LACEWING**

Class:

**INSECTA**

Order:

**NEUROPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

418

Common Name:

**LADY BEETLE**

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

419

Common Name:

# LEAFHOPPER

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

420

Common Name:

# LEAFCUTTER BEE

Class:

**INSECTA**

Order:

**HYMENOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

Common Name:

**432 LEAFMINER FLY**

Class:

**INSECTA**

Order:

**DIPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

Common Name:

**421 MEXICAN BEAN BEETLE**

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

422

Common Name:

# PINK BOLL WORM

Class:

**INSECTA**

Order:

**LEPIDOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

423

Common Name:

# PLANT BUG (LYGUS)

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

Common Name:

**430 SAWTOOTH GRAIN BEETLE**

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

Common Name:

**407 SPIDER MITES**

Class:

**ARACHNID**

Order:

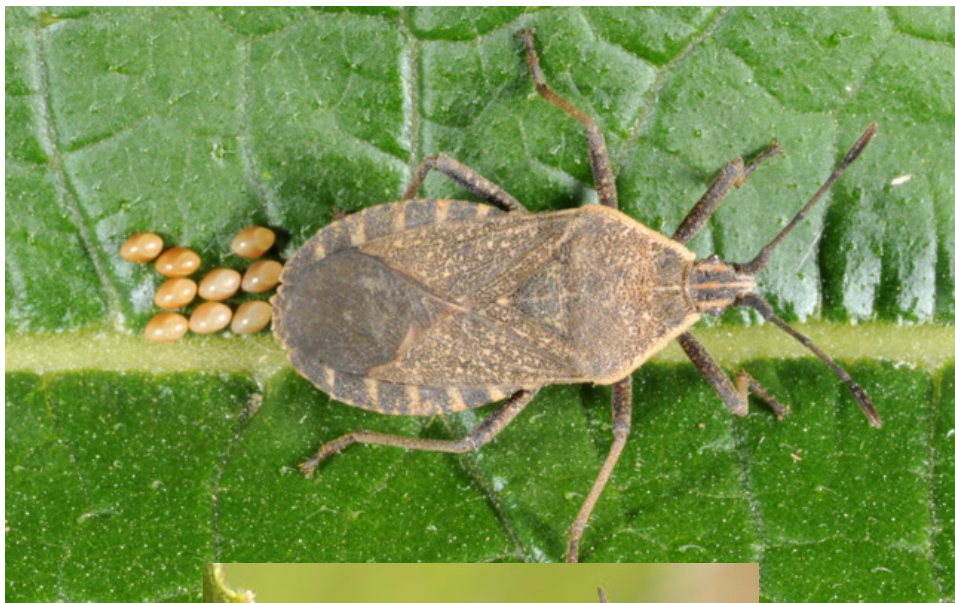
**ACARI**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

425

Common Name:

# SQUASH BUG

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

426

Common Name:

# STINKBUG

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**





ID # :

427

Common Name:

**THRIPS**

Class:

**INSECTA**

Order:

**THYSANOPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**



ID # :

428

Common Name:

**TOBACCO/TOMATO**

Class:

**INSECTA**

**HORNWORM**

Order:

**LEPIDOTERA**

Metamorphosis:

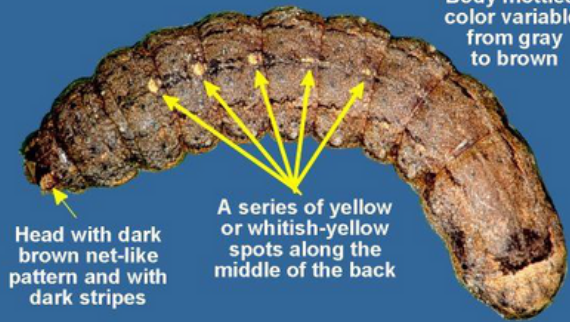
**COMPLETE**

Mouthparts:

**CHEWING**



### Variegated Cutworm Identification



Body mottled;  
color variable,  
from gray  
to brown

Head with dark  
brown net-like  
pattern and with  
dark stripes

A series of yellow  
or whitish-yellow  
spots along the  
middle of the back

ID # :

Common Name:

## 429 VARIEGATED CUTWORM

Class:

**INSECTA**

Order:

**LEPIDOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

Common Name:

## 424 WHITE FRINGED BEETLE

Class:

**INSECTA**

Order:

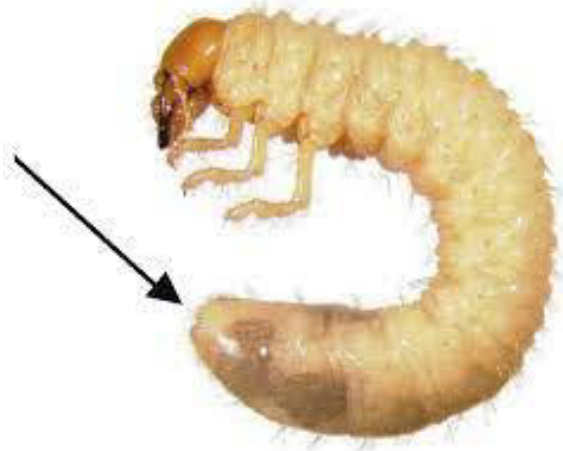
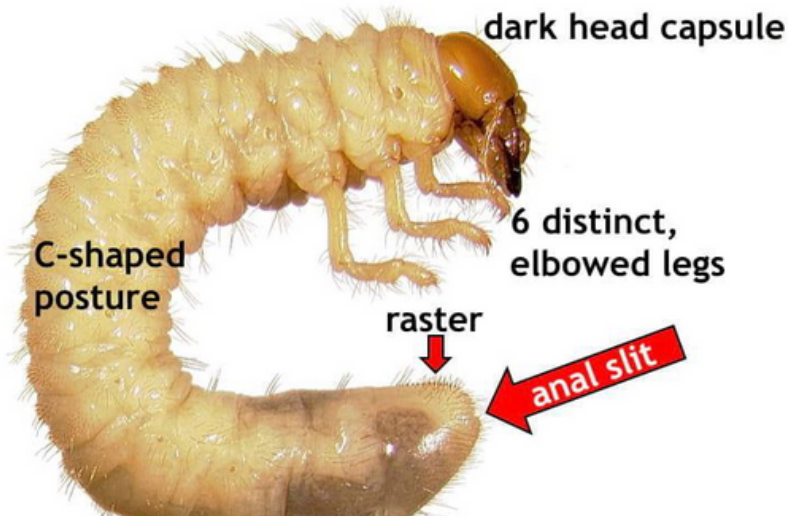
**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

434

Common Name:

# WHITE GRUB

Class:

**INSECTA**

Order:

**COLEOPTERA**

Metamorphosis:

**COMPLETE**

Mouthparts:

**CHEWING**



ID # :

433

Common Name:

# WHITEFLY

Class:

**INSECTA**

Order:

**HEMIPTERA**

Metamorphosis:

**SIMPLE**

Mouthparts:

**SUCKING**