

## Harmful Insect Collection



- A harmful insect collection includes insects that are pests to crops, stored grains, and property, as well as vectors of disease-causing agents for humans and animals.
- Examples include mosquitoes and ticks, which spread diseases like malaria and Lyme disease, respectively, and pests like termites, which damage structures.
- This collection could also include insects that cause painful stings, such as fire ants and hornets, or those that infest and contaminate food, like cockroaches.

### Harmful Insect Types and Impacts

- **Disease Vectors:** Insects like mosquitoes, tsetse flies, fleas, and ticks transmit deadly diseases, including malaria, dengue fever, West Nile virus, typhus, and Lyme disease, to humans and animals.
- **Crop Pests:** These insects damage agricultural crops by feeding on plants or stored grains. Examples include:
  - **Khapra beetles:** Infest and damage stored grains.
  - **Spotted and Pink Bollworms:** Pests of cotton crops.
  - **Leafhoppers:** Suck plant sap and spread disease in sugarcane.
  - **Stem Borers:** Feed on and damage the stems of crops like jowar.

### Structural Pests:

- Insects such as termites damage wooden structures, while cockroaches can spread germs and contaminate food in kitchens.

### Stinging/Biting Insects:

- Bees, wasps, hornets, and fire ants can sting, causing pain and severe allergic reactions in some people.

### **Parasitic Insects:**

- Bed bugs, lice, and fleas feed on humans and animals, causing itchy bites and potentially transmitting pathogens.

### **Methods for Collecting Harmful Insects :**

- **Trapping:** Various trapping methods, including those using black light lamps, can be used to collect harmful insects like army worms and cutworms for study and control purposes.
- **Sampling:** Techniques can be employed to sample and quantify infested materials, helping to understand the prevalence of pests like rice weevils in stored grains.

### **Examples of Harmful Insects in a Collection**

- **Mosquitoes:** To demonstrate their role as disease vectors.
- **Termites:** To show damage to wooden structures.
- **Cockroaches:** To illustrate the spread of germs.
- **Rice Weevils:** To depict pests of stored grains.
- **Fire Ants:** To show insects that cause painful stings.
- **Lice and Fleas:** To explain parasitic relationships and disease transmission.
- **Cotton Pests:** Such as Spotted and Pink Bollworms to show agricultural impact.