

**Title of the practice:** Integrated Pest Management (IPM).

**Objectives of the practice:**

1. To provide information of Integrated Pest Management to students and farmers of surroundings.
2. Distribution of nearby agriculture area into specific crop zones.
3. Correct identification and knowledge of pest biology with respective crop cycles zone and pest management.
4. Describe injury and action thresholds and know the difference between them.
5. Demonstration of remedies in pest management and give examples of common methods.
6. Know the importance of evaluating pest management results
7. To train students to control pest by IPM methods.

**The Context:-**

The goal of pest management is to manage pests effectively, economically, and safely. Insects, weeds, plant diseases, slugs, birds, and mammal pests can be managed using Integrated Pest Management (IPM). With IPM, you only need to reduce pest numbers below a damaging level. It is not necessary to eliminate all pests.

The IPM approach was first developed for agricultural pests. Since the 1980s, it has been successfully applied to landscape pests, forestry pests, structural pests, home and garden pests IPM helps decrease the need for chemical pesticides. This reduces costs and environmental risks. IPM is a decision-making process that helps to prevent pest problems. With IPM programs, all information and treatment methods are considered in order to manage pests. This should be effective, affordable, and safe for the environment.

Shrigonda is located in Ahmednagar District in the Indian state of Maharashtra It is located at 18.616° N 74.689°E It has an average elevation of 561 meters (1680Feet).Population of Shrigonda in 2021 is 353,203 Literate people are 189,001 out of 108,313 out of 108,313 are male and 80688 are female. Total 91468 cultivators are dependent on agricultute farming out of 49282 are cultivated by men and 42186 are women.39578 peoples works in agriculture land as a labour in Shrigonda.

In Shrigonda tehsil major population is involved in various agriculture activities such as Fruit Gardening, Vegetables gardening, food grain crops and legumes. Our students coming from agriculture background. Due to sudden climatic changes there is more attack of different pest on crops. It becomes necessary to identify and control them by integrated methods.

**The practice: -**

Department of Zoology, Botany and Chemistry organizes field visit to of nearby agriculture area of specific crop zone located in Shrigonda Tehsil. Viz..Pargaon,Belvandi Kothar,Hiradgaon,Limpangaon,Hangewadi. Student's collects information from these crop zones. During field visit students and faculty members discuss with various agencies such as farmers, forest department, agriculture department and other NGO's about crop cycle, pests occurred on different crops at different seasons. Students are trained for different practices such as cultural, mechanical, biological and chemical practices.These students provide information to farmers of different zones.Students collect data regarding pesticides from agrochemical vendors and their regular practices.Different group of students are made to collect information regarding diseases cycle of crops and etiological study have performed by the student.

### **Evidence of Success:-**

Department of Zoology, Botany and Chemistry organized field visit to nearby agriculture area of specific crop zones located in Shrigonda Tehsil following Covid-19 restrictions. Online demonstration lecture is organized for students to give the information and activity of integrated pest management. Students are trained for different practices such as cultural, mechanical, biological and chemical practices.These students provide information to farmers of different zones.Students collect data regarding pesticides from agrochemical vendors and their regular practices.

Crops such as *Triticum aestivum* (wheat),*Cajanus cajan* (Tur),*Citrus lemon* (Lemon), *Vitis venifera* (Grapes),*Pomogranate granatum* (Dalimb)and vegetable crops *Allium sepa*(Onion) are selected for pest treatment.