

Integrated Pest and Production Management

Background

Agricultural chemical use in the Asia and beyond has made it possible for farmers to produce a great volume of food. Chemicals (fertilizers, herbicides, insecticides, fungicides, rodenticides, plant growth regulators etc.) have allowed farmers to reduce human labor costs in production, and remain competitive in an increasingly global marketplace. However, this success in productivity has often been to the detriment of wildlife and the environment in many regions of the world. Many areas, for example, have experienced pesticide contamination of surface and ground waters. In addition to environmental problems, human health problems also arise from agricultural pesticide usage. Farmworkers and farmers have experienced chronic, long-term health problems from exposure to agricultural chemicals, and there are numerous cases of acute, or emergency health problems resulting from pesticide exposure. Additionally, consumers have long been concerned about the presence of pesticide residues in their foods.

Integrated Pest Management (IPM) is an ecosystem approach to crop production and protection that combines different management strategies and practices to grow healthy crops and profitable crop with minimum emphasis on synthetic pesticides. IPM has been promoted and accepted worldwide as an effective means for producing healthy and profitable crops. In recent years IPM has moved from single commodity based intervention towards a system approach of plant health management encompassing a range of management options to strengthen the ecosystem services at the same time produce safe crops for consumers.

Course Aim

This course has been developed to meet the training requirement of agriculture extension officials, NGO and CSO professionals those are involved in implementation of the crop protection issues.

It is designed to provide background knowledge and hands-on experiences to enable participants to develop local solutions to the vexed issue of crop protection at farmer's field in a manner that is safe for environment, farmers and consumers.

Course Duration and Location

Course is designed for a period of 8 weeks and is offered at Asian Institute of Technology, Pathumthani campus with field trips and exposure visits to the various parts of Thailand and in neighboring countries.

Tentative Course Contents

- Pest control to Pest Management
- Fundamentals of the pest management
- Biological, cultural, non-chemical control
- Important pests of various crops
- Climate Change Adaptation to Agriculture