Training Course on Integrated Pest Management (IPM) for Arable and Horticultural Crops

Professional Development Training Course Outline

Category	Agriculture	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Integrated Pest Management (IPM) is a sustainable, eco-friendly approach to pest control that combines biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. With the rising global demand for organic produce, climate-smart agriculture, and sustainable farming techniques, adopting IPM strategies has become essential for modern agricultural systems. Training Course on Integrated Pest Management (IPM) for Arable and Horticultural Crops provides practical skills and scientific insights to help farmers, agronomists, and stakeholders control pests while preserving crop yield and biodiversity.

The training focuses on real-world applications for both arable (such as maize, wheat, and legumes) and horticultural crops (fruits, vegetables, and ornamentals). By integrating smart farming technologies and agroecological principles, participants will be empowered to develop, implement, and monitor robust IPM plans. This approach not only boosts productivity but also aligns with global agricultural sustainability standards.

Programme Curriculum

Training Course on Integrated Pest Management (IPM) for Arable and Horticultural Crops

Introduction

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Course Objectives

1. Understand the principles of Integrated Pest Management (IPM).
2. Identify common pests in arable and horticultural crops.
3. Explore pest surveillance and monitoring techniques.
4. Apply eco-friendly pest control solutions.
5. Promote biodiversity and natural pest enemies.
6. Analyze pest-resistance management strategies.
7. Reduce pesticide dependency and residue levels.
8. Integrate digital farming tools in IPM practices.
9. Assess economic thresholds and decision-making tools.
10. Enhance climate-smart agriculture practices through IPM.
11. Understand policy and regulatory frameworks on pesticide use.
12. Design farm-level IPM plans with participatory approaches.
13. Evaluate success through measurable IPM performance indicators.

Target Audiences

1. Smallholder farmers
2. Commercial horticultural growers
3. Agribusiness professionals
4. Extension service officers
5. Environmental sustainability experts
6. Agricultural researchers and academicians
7. Agri-tech developers
8. Policy makers and regulatory officers

Course Duration: 5 days

Course Modules

Module 1: Introduction to IPM Concepts

- Definition, principles, and benefits of IPM
- History and evolution of IPM in agriculture
- Key components of a successful IPM program
- IPM vs. conventional pest control
- Role of IPM in sustainable food systems
- **Case Study: Transition from chemical control to IPM in maize farming in Kenya**

Module 2: Pest Identification and Life Cycles

- Insect pests of arable crops
- Common pests in horticultural crops
- Disease-causing pathogens
- Weed identification and impact
- Natural pest enemies and their roles
- **Case Study: Pest lifecycle analysis in tomato greenhouses**

Module 3: Pest Surveillance and Monitoring Techniques

- Scouting procedures and timing
- Use of traps, pheromones, and indicators
- Digital tools for pest detection
- Data interpretation for decision-making
- Predictive pest outbreak modeling
- **Case Study: Monitoring stem borers using ICT tools in cereal crops**

Module 4: Cultural and Mechanical Control Methods

- Crop rotation and soil management
- Sanitation and field hygiene
- Use of resistant crop varieties
- Physical barriers and handpicking
- Timing of planting and harvesting
- **Case Study: Mechanical weed control in onion fields**

Module 5: Biological Control Approaches

- Introduction to natural predators and parasitoids
- Microbial agents and bio-pesticides
- Habitat management for beneficial organisms
- Conservation biocontrol practices
- Enhancing biodiversity in farms
- **Case Study: Using Trichogramma wasps in cabbage pest control**

Module 6: Chemical Control in IPM

- Safe and judicious pesticide use
- Pesticide resistance management
- Label reading and dosage recommendations
- Timing and methods of pesticide application
- Environmental and health precautions
- **Case Study: Reduced pesticide use in sugarcane production through IPM**

Module 7: Developing and Implementing IPM Plans

- Stakeholder engagement and training
- Farm-level IPM decision-making
- Budgeting and resource planning
- Designing action thresholds and controls
- Monitoring and evaluating IPM success
- **Case Study: Community-based IPM program in vegetable cooperatives**

Module 8: Policy, Economics, and Future of IPM

- IPM and international regulations
- Cost-benefit analysis of IPM adoption
- Integration with climate change adaptation strategies
- Opportunities for scaling IPM via agri-tech
- Role of public-private partnerships in IPM
- **Case Study: National IPM policy implementation in Bangladesh**

Training Methodology

- Hands-on field demonstrations
- Group discussions and role-playing

- Use of real-life case studies
- Interactive multimedia presentations
- Expert-led Q&A and peer learning
- Evaluation through practical exercises and farm visit reports

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com