CONCEPT

Crop Protection and Integrated Pest Management Course for Field and Greenhouse Crops

10 – 14 May 2027
Dubai - Five-star CBD venue



Crop Protection and Integrated Pest Management Course for Field and Greenhouse Crops

Ref: 1591_25487 **Date:** 10 – 14 May 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 19500 SAR

Introduction:

Crop protection and integrated pest management for field and greenhouse crops is a 1-week course for agronomists, farm and greenhouse operations leads, crop protection advisers and plant protection officers, ending with a Crop Protection and IPM Programme for a case farm. Crops in hot climates lose yield and meet residue rejections when scouting is irregular, sprays follow the calendar and resistance builds unnoticed. Nominees already manage or advise on crop production, and teaching is by inspection walkthrough of case fields, palm groves and greenhouses. CoreConcept Training Center delivers this crop protection and integrated pest management course.

Course Objectives:

- Identify the main insect, mite, disease and weed problems of field, date palm and greenhouse crops from symptoms and life cycles
- Run scouting and trapping routes and record counts that show whether pest pressure is rising or falling
- Calculate action thresholds from economic injury level data and decide when treatment is justified
- Plan conservation and augmentative biological control and cultural tactics that reduce reliance on chemical sprays
- Design a season spray plan with a rotation that limits resistance, and calibrate sprayers to deliver the intended dose
- Prepare a Crop Protection and IPM Programme that links scouting, thresholds, tactics and residue checks for a case farm

Target Audience:

- Crop production managers responsible for yield and quality across open fields, orchards and date palm groves
- Greenhouse operations leads accountable for scouting, release and spray routines in protected crops
- Crop protection advisers who prepare pest control recommendations for growers and farm companies
- Plant protection officers who inspect farms, advise on pest outbreaks and support control campaigns
- Farm technical supervisors who direct spray crews, record applications and manage pesticide stores

Course Outline:

Day 1: Crop Pest Landscape, Biology and Farm Baseline

- Pest, Disease and Weed Identification Key for Crops
- Insect, Mite and Pathogen Life Cycle Charts Under Heat Stress
- Red Palm Weevil Life Cycle and Hidden Infestation Symptoms
- Whitefly and Spider Mite Population Growth in Hot Dry Conditions
- Farm Crop Protection Baseline Audit With Pesticide Use Records

Day 2: IPM Decision Cycle, Scouting Methods and Action Thresholds

- IPM Six-Step Cycle From Sampling to Evaluation
- Field Scouting Routes, Sample Sizes and Sequential Sampling Cards
- Economic Injury Level and Economic Threshold Calculation Worksheet
- Pheromone, Sticky and Pitfall Trap Layout for Palms and Vegetables
- Disease Forecasting and Weed Seedbank Mapping for Open Fields

Day 3: Biological Control, Cultural Tactics and Resistance Management

- Conservation Biological Control With Habitat and Refuge Planting
- Augmentative Release Plans for Predatory Mites and Parasitoid Wasps
- Entomopathogenic Fungi and Microbial Product Use Under Low Humidity
- Mode of Action Rotation Chart Limiting Resistance Selection Pressure
- Cultural Control Calendar With Sanitation, Rotation and Resistant Varieties

Day 4: Spray Programme Design, Application Technology and Residue Control

- Spray Programme Design Matrix by Pest and Crop Stage
- Knapsack, Boom and Air-Blast Sprayer Calibration Output Calculations
- Nozzle Selection, Droplet Size and Drift Reduction Under Heat
- Pre-Harvest Interval Planning and Residue Limit Compliance Checks
- Pesticide Safety, Re-Entry Intervals and Spray Record Sheet Control

Day 5: Inspection Walkthrough and the Crop Protection and IPM Programme

- Date Palm Grove Walkthrough With Weevil Trap and Injury Mapping
- Greenhouse Tomato Walkthrough With Whitefly and Mite Scouting Records
- Open-Field Vegetable Walkthrough With Weed and Disease Threshold Decisions
- Season Spray and Resistance Rotation Plan Drafting for Case Farm
- Crop Protection and IPM Programme Completion and Peer Defence

Skills You Will Gain:

- Pest Identification
- Crop Scouting Design
- Threshold Setting
- Biocontrol Release Planning
- Resistance Rotation Planning
- Sprayer Calibration
- Residue Interval Planning
- Application Record Keeping

Why Attend This Course:

- Deliver a Crop Protection and IPM Programme for a case farm to the farm owner, production director and technical committee
- Decide whether a pest count calls for trapping, a release of natural enemies, a cultural fix or a chemical treatment
- Avoid failed residue checks, wasted sprays, resistant pest populations and palm losses found only after the crown collapses
- Coach scouts and spray crews on sampling cards, trap servicing, calibration checks and application records

Conclusion:

Back at work, the participant presents the Crop Protection and IPM Programme to the farm owner, production director and technical committee, who use it to approve scouting staff, trap and release budgets, sprayer maintenance and the season spray plan. Spray crews and scouts use its sampling cards, thresholds and rotation chart to decide what is applied, where and when. After the first growing season, the unit should review pest counts, number of sprays, residue results and crop losses, then update the programme.

Frequently Asked Questions FAQ:

What should participants know before a crop protection and integrated pest management course for field and greenhouse crops?

Participants should already manage or advise on crop production and recognise common crop pests. Bringing scouting records, a spray diary or a farm map from their own site helps them apply the walkthroughs and the final programme to a real farm.

How does crop protection and integrated pest management for field and greenhouse crops differ from an organic farming or pesticide registration course?

It concentrates on scouting, thresholds, biological control, resistance rotation and spray application on working farms. Organic farming courses centre on soil and certification, and pesticide registration courses centre on dossiers and labels.

Why does crop protection and integrated pest management rely on action thresholds rather than calendar spraying?

Thresholds tie treatment to measured pest pressure and the cost of damage. Calendar spraying treats pests that may not be present, harms natural enemies and increases selection for resistance, so counts decide when action is worth taking.

What do participants take back from the crop protection and integrated pest management course for field and greenhouse crops?

Participants take back a Crop Protection and IPM Programme for a case farm, plus sampling cards, a threshold worksheet, a resistance rotation chart and a sprayer calibration sheet that they can adapt to their own crops.