

AGI6486 Field and Laboratory Technique in Plant Protection

Level	6
Course Code	AGI6486
Course Title	Field and Laboratory Technique in Plant Protection
Credit value	4
Core/Optional	Optional
Course Aim/s	To enable the student to identify pests and diseases infections
Course Learning Outcomes (CLO):	<p>Course Outcomes:</p> <p>At the completion of this course student will be able to,</p> <p>CO1: Explain the method/s of insect pest identification damaging the crops. [PO1] [PO2] [PO3]</p> <p>CO2: Identifying the insect pest damaged crops correctly. [PO1] [PO2] [PO3] [PO4]</p> <p>CO3: Identify the correct insect that do damage. [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7]</p> <p>CO4: Apply the Integrated Pest management systems. [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CO5: Explain the field diagnosis of plant diseases [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CO6: Discuss different laboratory methods of extracting and identifying disease causal organisms. [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CO7: Explain nature of different plant diseases. [PO1] [PO2] [PO3] [PO4]</p> <p>CO8: Explain the Integrated weed management programme. [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p>
Content (Main topics, sub topics)	<p>Outline Syllabus:</p> <p>Unit 1: Field and laboratory techniques in Insect damage identification</p> <p>Session 1: Field diagnosis of plant insects and it's attacks.</p> <p>Session 2: Monitoring and Identification Techniques for Insect Pests</p> <p>Session 3: Insect pest orders and their characteristics</p> <p>Session 4: Insect pests of cereals</p> <p>Session 5: Insect pests of pulses.</p> <p>Session 6: Insect pests of vegetables.</p> <p>Session 7: Insect pests of fruits.</p> <p>Session 8: Insect pests of ornamentals.</p> <p>Session 9: Polyphagous insect pests.</p> <p>Session 10: Principles of IPM: Pest Identification I</p> <p>Session 11: Principles of IPM: Pest Identification II</p> <p>Session 12: Preparing Insect pest collection</p> <p>Unit 2: Field and laboratory techniques of plant pathology</p> <p>Session 13: Field diagnosis of a plant disease – recognizing and interpreting symptoms</p> <p>Session 14: Preliminary laboratory identification of diseases</p> <p>Session 15: Laboratory techniques of identifying Bacterial diseases</p> <p>Session 16: Laboratory techniques of identifying Fungal diseases</p>

Session 17: Laboratory techniques of identifying Nematode diseases
Session 18: Plant diseases of cereals
Session 19: Plant diseases: Pulses
Session 20: Plant diseases of vegetables
Session 21: Plant diseases of fruit plants
Session 22: Plant diseases of cash crops
Session 23: Plant diseases of ornamentals

Unit 3: Field and laboratory techniques of plant pathology
Session 24: Major weeds in our environment
Session 25: Preparing weed collection
Session 26: Integrated weed management

Laboratory Work: Yes

1. Identifying different isolating techniques of plant causal organisms.
2. Evaluating pest damage extent by insect counting.