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| Title | **Carry out pest management** | | |
| Level | **3** | **Credits** | **9** |

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| Purpose | These competency statements will ensure that the trainee will be able to monitor the crop and control of insect pests. |

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| Classification ISCED | 0811 Crop and livestock production |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance criteria** | **Knowledge & Understanding** |
| **E-1:** Recognize insect pests and diseases, and access their nature of damage at various chilli production stages | **Trainee will be able to:**  **P1.**Identify the insect pests of chillies and diseases  **P2.**Relate insect pests and diseases with climatic factors  **P3.**Calculate losses due to insect attack  **P4.**Determine the economic threshold level for different insect pests  **P5.**Recognize the insect species and diseases that attack at particular stages of crop production- knowing the mode of action of insect and pest  **P6.**Monitor the crop for determining the level of insect activity  **P7.**Collect samples for insect identification and their comparative occurrence  **P8.**Recognize mouldy pods  **P9.**Separate mouldy pods  **P10.**Select the appropriate fungicide according to mould attack | **Trainee will be able to describe and explain: K1.**Knowledge about insect pests and diseases **K2.**Insect pests and their relationship with climatic factors **K3.**Identification of various pest species  **K4.**Losses due to insect pest attack  **K5.**Insect pests and diseases of chillies and their timings of occurrence  **K6.**Role of insects as a vectors of bacterial, viral and fungal diseases  **K7.**Developmental stages of insect pests  **K8.**Feeding sites of insects  **K9.**Sampling for detection of insects and their relative abundance  **K10.**Determining economic threshold levels(ETL) for different insect pests  **K11.** Determining the timing of pesticide application keeping in view their ETL |

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|  | **P11.**Identify different growth stages of insect pests |  |
| **E-2:** Determine the dosage and method of application of pesticides | **Trainee will be able to:**  **P1.** Differentiating the types of insecticides/fungicides **P2.**Selecting appropriate insecticides/fungicides **P3.**Obtaining insecticides/fungicides from reliable  source  **P4.**Prepare the solution insecticides/fungicides before applying to the crop  **P5.**Use the knap sack sprayer and its adjustment for crop spraying  **P6.**Determine the frequency and interval of pesticide application, keeping in view infestation levels  **P7.**Apply pesticide using safety measures **P8.**Select the appropriate sprayer **P9.**Calibrate the sprayer  **P10.**Select proper nozzle of sprayer  **P11.**Inspect the crop at different stages of production for insect pest and diseases attack | **Trainee will be able to describe and explain: K1.**Types of insecticides and their use  **K2.**Mode of action of different types of pesticides **K3.**Differentiation between generic and branded pesticides **K4.**Concept of active ingredient in calculating the dose **K5.**Preparation of suspension for crop spraying  **K6.**Impact of pH on insecticidal activity **K7.**Knowledge regarding the knap sack sprayer **K8.**Importance of the usage of knap sack sprayer  **K9.**Adjustments in knap sack sprayer for its optimum use **K10.**Determining the need of pesticide applications **K11.**Timings and frequency of pesticide application **K12.**Procedures of applying pesticides  **K13.**Principles of the safe usage of pesticides- selection of pesticide/insecticide having minimal residual effect and minimum with drawl period e.g. DDBP  **K14**. Advantages of applying precautionary measures for operators |