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| Title | **Store chillies in the factory area** | | |
| Level | **2** | **Credits** | **16** |

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| Purpose | These competency standards will ensure that the trainee is able to store chillies using suitable procedures for protection from insect pests and microbial attack in order to maintain quality |

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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 and Understanding** |
| **B-1:** Inspect and select the site/ware house for storage of whole chillies | **Trainee will be able to:**  **P1.** Inspect the storage site to determine its suitability for the storage of chillies  **P2.** Check the site for insect and rodent pests  **P3.** Identify insect species inhabiting the store  **P4.** Identify type of rodents present in and around ware house  **P5.** Inspect the storage site for presence of fungi  **P6.** Inspect the storage site for proper ventilation  **P7.** Check that the storage area is suitable for fumigation  **P8.** Check the storage site for maintaining the humidity and temperature  **P9.** Measure the total storage area in meter3  **P10.** Examine the storage conditions  **P11.** Calculate the feasibility of storage site | **Trainee will be able to explain:**  **K1.** Prerequisites of good storage management  **K2.** Factors effecting storage of chillies  **K3.** Impact of temperature, humidity, packing material etc. on seed viability and chilli quality during storage  **K4.** Maintenance of storage conditions viz. humidity, temperature etc. during storage period  **K5.** Types of storage  **K6.** Possible modes of storage  **K7.** Impact of storage fungi on chilli quality  **K8.** Calculation of storage area  **K9.** Frequency of fumigation during storage period |

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| **B-2:** Recognize the insect pest and their nature of damage during storage | **P1**. Identify the insect pests of chillies  **P2.** Monitor the chilli lots for determining the level of insect activity  **P3.** Collect samples for insect identification and their comparative occurrence  **P4.** Identify the insect species that can affect the quality of chillies  **P5.** Identify the larvae of various insects  **P6.** Calculate the level of infestation of insects  **P7.** Determine the type of damage caused by particular insects  **P8.** Assess the mode of action of particular insect species  **P9.** Determine the economic threshold levels (ETL) for different insect pests | **K1.** Types of insect pests  **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 of chillies and their timings of occurrence  **K6.** Role of insects as a vector 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.** Importance of economic threshold level (ETL) of different insect species  **K11.** Determining the timing of pesticide application keeping in view their ETL |
| **B-3:** Determine the dosage and method of application of fumigants | **P1.** Differentiate the types of insecticides or fumigants  **P2.** Select appropriate insecticides or fumigants  **P3.** Determine the frequency and interval of fumigation keeping in view infestation levels | **K1.** Types of insecticides or fumigants and their use  **K2.** Mode of action of different types of insecticide and fumigants  **K3.** Differentiation between generic and branded pesticides |

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|  | **P4.** Apply suitable pesticides to disinfect the storage site if required  **P5.** Apply the proper dosage of fumigants according to the capacity of ware house  **P6.** Take all necessary precautionary measures during and after fumigation | **K4.** Determining the need of fumigant applications  **K5.** Timings and frequency of fumigation  **K6.** Procedures of applying fumigants  **K7.** Principles of safe application of fumigants  **K8.** Knowledge about precautionary measures for operators  **K9.** Determination of correct dose of fumigant for various types of godowns/stacks |
| **B-4:** Store the chillies under proper conditions | **P1.** Pack and tag the chilli lots for identification by recording details like date of entry, persons involved etc.  **P2.** Store chillies under suitable conditions to maintain its quality and wholesomeness by keeping them free from insects, rodents and microbial attack etc.  **P3.** Undertake periodic inspection of stores to ensure chilli quality  **P4.** Determine the fumigation requirements to arrest insect infestation during storage  **P5.** Undertake fumigate adopting suitable procedures for application of fumigants and taking the require safety measures  **P6.** Maintain the storage conditions unfavourable for growth and development of fungi and insects ensuring proper ventilation | **K1.** Techniques used for storage of chillies for required duration  **K2.** Periodic Inspection of stores and produce  **K3.** Determination of the frequency of fumigation **K4.** Procedure for undertaking fumigation of chillies **K5.** Safety measures during fumigation  **K6.** Maintenance of optimum storage conditions like humidity, temperature etc.  **K7.** Record keeping for storage inventory and conditions  **K8.** Good storage management of chillies  **K9.** Storage capacity and its optimum utilization |

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|  | **P7.** Store chillies in suitable size stacks keeping in view the capacity of ware house |  |