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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 |  |