

Syllabus for Short- Term Training Course (STTC) on “Storage Pest Management & Fumigation ” at IGMRI Campus, Hapur.

(02 weeks duration)

1. Production of foodgrain and post harvest losses in India, General problems of storage of foodgrains, Factors responsible for the storage losses at commercial and farm level.
2. Food Safety & Standard Act & its importance. Uniform Specification, Procedure for inspection of foodgrains, terminology, Necessity and utility.
3. Role of Moisture in spoilage of stored grain, moisture migration, measurement of moistures content in foodgrain and milled products. Chemical and nutrition value changes during storage period in food grains.
4. Quality of foodgrains, its maintenance during storage foodgrains i.e.Categorization classification grade designation, etc.
5. Principles of construction of scientific metallic & non-metallic storage structures & their specifications.
6. Mode of Action of insecticides, rodenticides & fungicides. Pesticides tolerance limit of residues, antidotes and precautions and safe handling of pesticides.
7. Insect pest of stored grain and milled products, Integrated Insect Pest Management, Sources and detection of infestation in stored foodgrains.
8. Identification of rats and Management . Termite and their control, Control of house hold pests.
9. Toxic contaminants in foodgrains, their ill effect and prevention.
10. Prophylactic / Curative treatments – chemicals dosages and methods of application, Use of safety equipment & first aids measures.
11. Pesticides, their formulation physical chemical and biological of handling, application and factor affecting their efficacy, Handling & storage of chemicals/ dangerous goods in warehouses & precautions thereof.
12. General Principles of fumigation, different type of fumigations with MBr, Alp and Precautions in their use.
13. Proper fumigation practices (correct/recommended dosage of fumigant, proper fumigant distribution, required exposure period, correct concentration of gas within fumigation chamber; proper understanding of temperature, humidity relationship and C XT relationship for effective fumigation.
14. Insecticide Act, Consumer protection Act & Stress Management.
15. Quarantine Treatment & licensing Procedure of MBr and Alp. Fumigation – NSPM- 11 & 22. Testing for gas leakage measuring, use of phosphine monitor and factors contributing to success / failure of fumigation.
16. Role and function of Warehousing Development and Regulatory Authority and negotiability of Warehouse Receipt. Role of regulation agencies & responsibilities of fumigation operators.
17. Stack/Container/Ship fumigation. Maintenance of Fumigation records.