

Precautions to be taken during fumigation

- ❖ The Phosphine gas which is released in the process is highly poisonous hence, all precautions should be taken by personnel involved.
- ❖ The fumigation should be carried out by following proper procedures under supervision of trained personnel in appropriately prepared fumigation enclosures.
- ❖ The stock should not be fumigated in rainy days as phosphine is highly inflammable.
- ❖ Entire stack should be covered with Multi-layer Cross laminated (MLCL) fumigation covers 200 GSM and pinholes should be closed properly for successful fumigation.
- ❖ All the corners of plastic cover should be plastered with 6 inch thick layer of mud/sand snake/adhesive tapes to prevent leakage of gas.



Stored Grain Insect Pests of Rice and their Management



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STORED GRAIN INSECT PESTS OF RICE AND THEIR MANAGEMENT

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To feed the growing world population of 9.8 billion (by 2050); we need to produce about 70% more food grains. Improving the agricultural production is the major policy to cope-up with the increasing food demand. However, post-harvest loss; a critical issue does not receive the required attention and importance. Globally 1.3 billion tons (worth US\$ 1 Trillion) of food produced are wasted annually during post harvest operations which is one third of the total food produced (FAO, 2011). In India the total post-harvest losses at different stages (harvesting, threshing, transportation & storage) have added up to about 36% in rice and 33.5% in wheat (Basavaraja et al., 2007). Post-harvest losses are caused by both biotic (insects, mold, birds, mites, rodents etc.) and abiotic (moisture content, temperature and humidity etc.) factors. Among them the storage loss due to insect pests alone is ranging from 4.0 to 6.0% for cereals (Dhingra, 2016). Reducing the post-harvest losses, especially in developing countries address various problems viz., increasing food availability, reducing pressure on natural resources, eliminating hunger and improving farmers' livelihoods.