

Management of Aflatoxin Contamination in Groundnut: Post-harvest Processing and Storage Practices

Aflatoxins

Aflatoxins are produced by many species of *Aspergillus* belong to the section Flavi. Among 20 different types of aflatoxin B1, B2, G1 and G2 are important for trade point of view mainly produced by *Aspergillus flavus* and *A. parasiticus*. Aflatoxin B1 being genotoxic carcinogen, their presence in commodities is a serious health hazard especially to liver. Aflatoxins producing fungi can colonize and contaminate agricultural commodities before harvest, in transit and at storage.

In addition to good agricultural practices (GAP), good processing and storage practices prevents growth of the noxious fungi and its toxin contamination.

Good Processing and Storage Practices


- Dry the groundnut pods and kernels to the moisture content below 7%.
- Preclean the pods before storage in-order to avoid mixing of mouldy, discoloured, decayed, shrivelled, insect damaged pods with the healthy pods.
- Store the pods and the kernels in high density polythene bags or polythene lined gunny bags.
- Stack the pods/kernels on wooden or plastic pallet or on tarpaulin and keep adequate distance from side wall.
- To prevent damage of pods/kernels by insects in storage, fumigate with aluminum phosphide 56% @ 10g/tons of pods.
- Keep adequate insect and rodent traps in the storage and processing premises.
- Keep the storage space free from any kind of seepage or leakage water.
- Avoid rewetting of pods before decortication.
- Avoid mixing of kernels having different level of moisture content.
- Post-harvest processing technologies viz., blanching, roasting and sorting of peanuts likely removes aflatoxin contaminated kernels.
- Value addition processes viz., preparation of peanut butter, peanut chocolate, peanut milk, ready-to-eat therapeutic foods, peanut burfi etc., dilute the possible aflatoxin load in the products.



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