

Quality change of wheat grain during storage in a ferrocement bin

ABSTRACT

Wheat is a seasonal agricultural commodity which produces once in year. The demand of wheat remains high throughout the year because it is considered as staple food in developing countries including Pakistan which necessitates the proper storage and maintenance systems to obtain quality grains. Grain stored for one year in ferrocement bin retained better germination percentage, starch content and falling number than grain stored in room type store. Ferrocement bin protected stored wheat from deterioration caused by fungi, aflatoxin, and insects while wheat stored in conventional room type store suffered severe damages. Ferrocement bin showed lower grain moisture and grain weight loss throughout the storage period than room type store. The quality of wheat in traditional room type storage system was low and this storage system was inadequate for protecting stored wheat from deterioration. Therefore ferrocement bin has proven to be a promising solution for storage of good quality grain.

Keyword: Wheat storage; Aflatoxin; Seed germination; Starch; Weight loss