

A study on the quality of wheat grain stored in straw-clay bin

ABSTRACT

The adoption of poor storage techniques usually results in tremendous post-harvest losses and leads to the shortage of grains to feed the overwhelming population. The straw-clay bin was developed as one of the viable solutions to obtain a high quality stored wheat and higher income to the farmer by storing wheat at harvest and sell it in the off-season at higher rates. Straw-clay bin was evaluated by storing wheat for one year and showed promising results. Fungal damage and grain weight loss were limited to 9% and 1.27%, respectively. Germination capacity, protein, fat, starch and ash of wheat grains decreased from 94 to 74%, 12.46 to 11.78%, 3.03 to 2.4%, 65.55 to 64.87%, and 2.04 to 1.76%, respectively. The study has revealed that straw-clay bin provide a safe and convenient method for farmers to preserve their agricultural commodities. Hence, the adoption of straw-clay bin must be encouraged in the developing countries.

Keywords: Storage; Germination; Moisture; Fungi; Starch