

Title Traditional cereal storage and insect pests in some villages of southern Chad.
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Abstract

Results of cognitive surveys carried out on postharvest aspects of cereal storage and insect pest infestations were reported at farm/village level in 10 villages (Bebanassa, Beboumbura, Bekila, Bekoura, Belama, Betedje, Bongmara, Doholo, Gore, and Polo) of Southern Chad. In this area, millet, sorghum, maize, and pearl millet are among the most important staple foods. Traditional methods of grain storage are applied in an economy essentially oriented towards survival and self-sufficiency. Open timber platforms are the main facilities used for temporary storage. The most common facilities for long-term storage are mud or clay silos, jute or polypropylene sacks, cribs made of plant materials exclusively, and clay jars and hats constructed of wood and straw or of earth bricks. Gourds and calabashes are usually used for domestic storage of products in small amounts. According to information received from the farmers regarding postharvest losses of cereals, 70-80% of the harvest is lost after 8-9 months of storage. The most common storage problems mentioned by the villagers are insect pest infestations and rodent activity. Local people rely on indigenous pest management approaches, which include the use of inert materials and botanicals for the control of storage pests. Stored grains revealed infestations of many insect pests. In the samples of cereals taken to the laboratory, *Cryptolestes ferrugineus*, *Cryptolestes ugandae*, *Palorus ratzeburgi*, *Rhyzopertha dominica*, *Sitophilus oryzae*, *Tribolium castaneum*, and *T. confusum* were found most frequently. Traditional storage methods carried out by farmers are well anchored in the culture of local people; nevertheless, they seem to be ineffective in containing the heavy losses caused by pest infestations.