

# DETERMINATION OF STORED PRODUCT LOSSES OF DURABLE AGRICULTURAL COMMODITIES IN ANURADHAPURA DISTRICT

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The loss of agricultural commodities occurs following harvest, as well as in the field. Anuradhapura District is a major production area of paddy, other cereals, pulses and legumes in Sri Lanka. No recent update is available regarding the stored-product losses of these commodities in Anuradhapura District. This study was designed to determine stored commodities, storage methods, losses during storage and insect species infesting stored food in Anuradhapura District. The experimental design was Completely Randomized Design. Data were collected from twenty two divisional secretariats, twenty farm families from each division, using a questionnaire. Paddy, maize and green gram were the major stored products found. There were four places of grain storage: room inside the house, kitchen, room outside the house and temporary hut. Loss in the room outside the house was significantly different from that in kitchen, room inside or temporary hut. Storage losses of a paddy variety or maize did not vary between DS divisions. Green gram was stored rarely. *Tribolium castaneum*, *Rhyzopertha dominica*, *Sitophilus oryzae* and *Sitotroga cerealella* were found as pests during paddy storage. *Callosobruchus* species was found as a pest of green gram storage. Qualitative losses were identified as damaged seeds, grain flour, empty grains and fecal matter. This study reveals that grains and pulses are both quantitatively and qualitatively damaged during storage, and insects are a major cause of these losses. Reasons for the differences in the storage pests among DS divisions needs further investigations.

**Keywords:** DS divisions, Insects, Qualitative, Quantitative, Storage loss