

Title Low cost seed storage techniques for certain hardy indigenous pod vegetables
Author S.D. Doijode
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Abstract

Cowpea and cluster bean are indigenous, hardy and popular in rural areas. Seed and quality decreases with storage of pod vegetables, rendering them unfit for sowing. High seed quality helps in raising healthy plant and establishment of optimal plant population in field. Seed quality is largely dependent on storage temperature and relative humidity. High temperature and humidity promote seed deterioration, enhances microbial activity and reduce the seed quality. An experiment was conducted with the view to preserve high seed viability and vigour under ambient condition (16-35°C; 25-90% RH) using desiccants and modifying the storage atmosphere. High seed viability (80%) was recorded in cluster bean in seeds stored with carbon dioxide for 5 years under ambient conditions as compared to control. Likewise, seeds of cowpea showed higher germination (95%) when packed in partial vacuum and in carbon dioxide after 3 years of storage. In both cluster bean and cowpea seed germination was also higher in seeds stored with desiccants like silica gel and charcoal than the control, under ambient conditions. Seedlings emerged from stored seeds were normal, healthy and vigorous.