

ABSTRACT

Studies on the Quality, Storage and Handling of Sweet Pepper (*Capsicum annuum L.*) Seeds in Trinidad.

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A three part study was carried out between 1990-1993 to investigate the quality, storage and handling of sweet pepper (*Capsicum annuum L.*) seeds in Trinidad.

In Part 1 of the study surveys were carried out farmers, retailers and wholesalers handling sweet pepper seed. Surveys indicated farmers, retailers were obtaining low seed germination percentages with sweet pepper seed.

In Part 2 of the study the quality of seeds of two of the more popular sweet pepper varieties (California Wonder 300 and Bullnose) obtained from five selected wholesalers were evaluated. Results indicated that prior to storage, seeds were essentially of good quality, with the exception of Bullnose sweet pepper seeds obtained from one wholesaler. In a 24 month storage trial sweet pepper seeds were subjected to three storage conditions, ambient (28-30°C and RH 75-80%), controlled atmosphere (21-23°C and RH 60-65%), refrigerated (4-7°C and RH 25-50%). Results showed that apart from one wholesaler, seeds from all wholesalers stored in hermetically sealed cans stored well up to 24 months under all conditions but stored best under refrigerated conditions.

In Part 3 of the study the quality of sweet pepper seeds from six selected retailers were evaluated. Findings showed that with the exception of Bullnose seed obtained from one retailer, the quality of sweet pepper seeds of the two varieties tested was of a commercially acceptable standard. In a 12 month trial seeds in various packaging materials (paper, polyethylene (5 mil thickness), sealed cans and opened cans), seeds were exposed to three storage conditions. Generally seeds in sealed cans stored the best, while those in opened cans performed the worst.

In seedbed emergence trials it was noted that the type sowing technique used by farmers may affect the final emergence of sweet pepper and may be a contributing factor to low emergence percentages reported by farmers.

There is therefore good cause for monitoring the quality of wholesale and retail sweet pepper seeds, while the establishment of a local seed testing agency was deemed important.

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Kay