ABSTRACT

Studies on the quality of selected imported vegetable seeds in Trinidad

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A study was undertaken in 1988 at the University of the West Indies to evaluate physiological seed quality of the five most popular vegetables (tomato, cucumber, lettuce, cabbage and watermelon) planted in Trinidad. The handling and storage by both sellers and farmers of these vegetable seeds were investigated. Farmers were also interviewed to ascertain if they had any complaints about the physiological quality of the seeds they were receiving. Several quality tests were performed in the laboratory on seeds purchased from selected local outlets. These included standard germination and vigour tests and moisture content determinations. Greenhouse trials were also performed and preliminary tests were done in the field on selected samples.

The laboratory studies showed that both the Cascade and Capitan varieties of tomato gave very good results during testing. The Kono Cross variety of cabbage gave consistently poor results for all outlets sampled and this was attributed to the advanced age of the seeds, their high moisture content and the low viability of the lot from which they originated. There were also some noticeable quality problems with the Migonette Bronze variety of lettuce. Some of the cucumber and watermelon samples as well as samples of the other varieties of cabbage and lettuce tested gave unacceptable results after quality tests were conducted.

Personal interviews with wholesalers retailers and farmers showed that
the most popular seed types purchased were tomato, cucumber, watermelon, cabbage and lettuce. Most of the seeds imported into Trinidad came from seed housed in the United States and Japan and the most common material in which seeds were received and sold was hermetically sealed containers. The majority of wholesalers and retailers repackaged seeds in polyethylene, however, many farmers did not purchase large amounts of repackaged seeds. The majority of farmers interviewed did not store their seed supply for long periods. In an interview conducted with farmers in 1989/90 many of them complained about the seeds they were receiving but upon closer investigation in 1992 and 1993 it was realised that the situation was not as serious as was thought initially. Several of the problems resulted from pests and diseases and a few were because of poor physiological quality.

It would seem that farmers have grounds for complaints because of the numerous samples received and tested for quality in this study which gave poor results. There is evidence to suggest that poor quality seeds are being imported, marketed and sold in this country; however further work is needed to ascertain the quality of seeds at the point of entry into Trinidad and the effect of handling practices by local outlets.