

## B-37 Improvement of pineapple by hybridization

M F S W Fernando, L P Somadasa, H P I D Kanthi

*Regional Agricultural Research and Development Centre (RARDC), Makandura, Gonawila (NWP)*

Pineapple, *Ananas comosus* (L.) Meri. is a perennial monocarpic herb which belongs to the family *Bromeliaceae*. Although many commercial varieties of pineapple are known, only 2 varieties are cultivated in Sri Lanka. They are Kew and Mauritius. The Kew variety produces large fruits mainly utilized for canning, while the Mauritius variety produces comparatively smaller fruits, suitable for the fresh market. Mauritius fruits are not good for processing either as solids or juice, because of the low recovery (conical shape) and low juice yields. Due to the high acidity and pale fruit colour of the Kew variety, there is no demand for this variety in the local and export market. Therefore, it is necessary to produce a variety suitable for consumption as fresh or processed product.

Therefore, the variety Mauritius was reciprocally crossed with the variety Kew, UNK-1 and UNK-2 introductions. 4 months after pollination seeds were extracted. Seed setting was good and 85% of seed set was observed. Seeds were treated with 80%  $H_2SO_4$  to facilitate germination. Seeds germinate in about 15 days after sowing and germination was 90%. 10 months after germination, seedlings were planted in the field for evaluation. Out of all crosses, 2 selections were made from the UNK-01 x Mauritius cross for better characteristics. Hybrids from such crosses had better characteristics than the parent Mauritius. Therefore, hybrid breeding tool can be used to improve pineapple varieties in Sri Lanka.