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On-farm evaluation of elite tomato varieties

Tomato (*Lycopersicon esculentum Mill*.) is one of the most popular vegetables in Sri Lanka. It covers an area of 5400ha and among vegetables it ranks next to beans. It is a crop giving income to farmers, improves human nutrition and health and generates employment avenues for youth in urban and rural areas.

This study was initiated with the objective of identifying promising genotypes having high farmer acceptability. During yala 1998 four elite varieties (CLN 65, BL 355, Manik and T 245) were tested in farmers fields (03 locations in Kandy district and 03 locations in Matale district). The 18 day –old seedlings were transplanted in 8x6m2 plots with a spacing of 50cm x 80 cm and single seedling per hill. Soil analysis was carried out in each location and fertilizer application was done according to soil test based fertilizer recommendations. In plant protection and other cultural practices, departmental recommendations were followed.

This variety Bl 355 gave the highest yield (14.08 t/ha) and Manik gave the lowest yield (5.31 t/ha). Stability analysis using the deviations from maximum response was practiced to analyse the data. It was revealed that the variety BL 355 had the lowest deviation mean (1.38) and lowest varietal deviation vriance (2.86). Hence it is being ranked first followed by T245, CLN 65 and Manik.The variety BL 355 had performed well in respect of adaptability and stability. The farmers specially in Matale district prefer BL 355 for its yield and fruit quality characteristics like color and shape.

Therefore, the variety BL 355 is a promising genotype which could be introduced to farmers in Matale and Kandy district.