B-34 Evaluation of ten indeterminate type tomato varieties in mid country wet zone

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Tomato is grown in all agro-ecological zones of the country except in up country wet zone, where ann rainfall is over 2000 mm. Perhaps more than any other crops, tomatoes hold the promise of increas farmer incomes and improving the diets of both rural and urban population. However, several constra adversely affect tomato production in the country. Some of these are: lack of improved varieties, pest diseases (especially Bacterial wilt), post-harvest losses and marketing problems. Therefore, the m objective of the breeding programme at HORDI is the development of high yielding (20 t/ha) varieties w Bacterial wilt resistance and desirable produce qualities and adaptability to different growing environm

In this study 10 indeterminate type introduced varieties (ID_1, ID_2, ID_3, ID_4, ID_5, ID_6, ID_7, ID_8, ID_9, ID_{10} Superma together with a promising indeterminate variety (BT15-1) were tested at Gannoruwa during M 96/97. The experimental design was a Randomized Complete Block Design with 3 replications. The days-old seedlings were transplanted in a 2.4 x 3.5 m plot with a spacing of 50 x 80 cm and single seed per hill.

All the varieties except ID_5 and ID_1 gave a yield greater than 20 t/ha. The variety ID_{10} gave the highest yi (31.8 t/ha) and it was superior to ID_5, and ID_1 varieties. The tested entries showed resistance to Bacte wilt disease. ID_6, BT 15-1, ID_4, ID_2,and Superma are good for salad purposes.

Therefore, varieties ID_6, ID_4, ID_2, and Superma are found to be promising fresh market type indetermin varieties based on yield performance, pest and disease reaction and fruit quality characteristics.