

B-51: Characterization of locally available tomato varieties

M C P Rodrigo¹, D G N G Wijesinghe¹, D B T Wijeratne²

(¹Faculty of Agric, Univ of Peradeniya, ²Div of Food Tech, Horticultural Research & Development Institute, Gannoruwa)

In the past, varietal selection of tomato in Sri Lanka was done mainly on yield potential, pest and disease resistance and other plant characters, rather than fruit quality. However, the rapid development of the tomato industry in developed countries, may initiate processing of non-traditional tomato products in Sri Lanka, which require specific fruit quality characteristics. In this study some physical and chemical parameters of locally available tomato varieties were evaluated for characterization of different end uses. Since quality characteristics, especially colour, Brix and firmness change with environment and stage of harvesting, fruits were collected from research fields of major cultivation areas of Matale, Bandarawela and Kandy.

Among local varieties T-245, T-244, B-1, BT-15-1, Carabai and Biansz can be used for canning due to their large/medium size, (diameter higher than 55 mm), smooth and regular shape, deep uniform red colour and thick pericarp (>4 mm). Roma, KWR, B-2, V-2 and T-244 are suitable for juice manufacture as they contain high contents of juice and acceptable acidity levels (>1% as citric acid). Carbai, Biansz, B-1 and BT-15-1 can be recommended for salads as they have large red medium size fruits and

uniformly red coloured mesocarp. Varieties Roma, Biansz, V-1 and B-2 are ideal for puree, catsup, sauce and paste-making due to their fruit characters such as high pulp content (higher than 50%), high soluble solids content (Brix > 5.5) of juice, smooth skin and shallow stem cavity.