

**B-124: *In vitro* propagation of *Carica papaya* for "clean plants"**

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*Carica papaya* is a largely consumed fruit in Sri Lanka. Also, the latex of the fruit is used for medicinal and various other purposes. Papaya cultivation is hindered by virus diseases which are difficult to control by physical and chemical means.

The long term objective of this study is to propagate papaya through meristem tip culture so that a large number of plants of elite varieties, free of diseases, could be obtained within a relatively short period. In the present study, in vitro multiplication of the shoot tip was attempted.

Surface sterilized apices of papaya seedlings were the starting material. Under aseptic conditions, meristem tips were transferred to Murashige and Skoog (1962) (MS) semi-solid medium supplemented with BAP (2 mg/l). In this medium, a single tip multiplied and produced about 20 small shoots within 6-8 weeks. It was also observed that the number of plants could be increased by sub-culturing: by separating shoots into 3-4 clusters, each having about 5 shoots and transferring to similar fresh medium. This could be repeated every 4-6 weeks. Well developed shoots could be obtained upon transfer to MS with BAP (0.5 mg/l) and IAA (0.5 mg/l).

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