

B-151 A preliminary study on *in vitro* propagation of some *Citrus* species

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Single nodal cuttings from bud position 1 to 5 (from the base) were taken from field grown mature plants of *Citrus aurantifolia* (shoot length: 11 ± 1 cm) and *Citrus limon* (shoot length: 15 ± 1 cm) when the desired shoot lengths were reached.

Murashige and Skoog medium supplemented with 1.0 mg/l 6-benzylaminopurine (BAP), 0.5 mg/l BAP with 0.5 mg/l gibberellic acid (GA_3) were tested for shoot proliferation separately on buds of different positions. Single nodal cultures were incubated at room temperature under photoperiod of 16 h and 3000 lux.

Single nodal cuttings taken from 11 ± 1 cm long *Citrus aurantifolia* and 15 ± 1 cm long shoots from *Citrus limon* had less contaminations (10%) and showed an average survival of 70%, than those from shorter or longer shoots.

The effect of explant on multiplication was investigated by taking the position of the node from only the shoots taller than 1 cm during 3 subcultures. Counting from the base node upwards, the 3rd and 4th proved to be better than the shoot tip for proliferation. A higher multiplication was observed on media supplemented with BAP and GA_3 , whereas BAP alone produced single shoots of short height. On the former medium, a maximum of 5 shoots were produced from a node in 3 weeks.

The present study is being continued to screen for disease free plants of citrus.