

IN VITRO MULTIPLICATION AND ROOTING OF *Artocarpus heterophyllus* LAM**K.A.H.K. Kasthuri Arachchi and W.T.P.S.K. Senarath**Department of Botany,
University of Sri Jayewardenepura

Artocarpus heterophyllus is an out breeding species. Therefore germination of seeds may give seedlings with vast genetic diversity. Clonal propagation of selected genotypes is very useful in maintaining selected characters.

Apical meristem from 20-30 years old jak plants were cultured in modified Campbell and Durzan (CD) medium supplemented with 0.5mg/l Indole Butyric Acid (IBA) in order to elongate shoots *in vitro*. After six weeks of incubation in $25\pm 1^{\circ}\text{C}$ (16 hr day), 60% of the explants produced elongated shoots. They were cultured on Murashige & Skoog (MS) medium containing 1.5mg/l IBA and 0.5mg/l kinetin for shoot multiplication and 4-5 shoots per explant were obtained after five weeks of incubation. Non-multiplied shoots were transferred into $\frac{1}{2}$ MS medium containing 1.5mg/l IBA and 1.0mg/l Naphthalene Acetic Acid (NAA) after five weeks. If shoots were kept in the same medium ($\frac{1}{2}$ MS medium containing 1.5mg/l IBA + 1.0mg/l NAA) for more than two weeks they will produce callus instead of roots at the base. Therefore after two weeks they were transferred into CD medium containing 0.5mg/l IBA for rooting. Root initials were observed after 10 days of incubation.