## O-23 (14) SOME FACTORS AFFECTING IN VITRO PROPAGATION OF KAEMPFERIA ROTUNDA

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In vitro propagation studies of Kaempferiarotunda were carried out. Pseudostem explants excised from stock culture, 1.5 cm in height, were cultured onto modified MS media for 8 weeks. It was found that liquid media promoted shoot multiplication better than agar media. There were 5.63 shootlets/explant produced in liquid media while 4.05 shootlets produced in agar media. Adding 0.5, 1.0 mg/L of BAP or TDZ induced 4.70-6.15 shootlets which were significantly more than 2.80 shootlets produced in the control. Activated charcoal (AC) decreased shootlet number but increase height of plantlets. Moreover, it decreased leaf width but had no effect on number of leaves, number of roots and their length. Various concentrations of sucrose had no significant effects on number of shoots, which 1.10-1.45 shootlets were produced. However, 8% sucrose decreased height, number of leaves, and size of leaves but increased number of roots having significant shorter length. Plantlets were successfully transferred to the greenhouse having 95% of survival rate.

<u>Keywords</u>: Kaempferia rotunda, thidiazuron, BAP, activated charcoal, sucrose, *in vitro*, propagation