B-46 Differences observed in the multiple shoot induction in two species of rattan *Calamus thwaitesii* and *C.zeylanicus*

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Rattans have become depleted in their natural habitats and require replanting. Good quality planting stock is needed. Tissue culture techniques of micropropagation were investigated in different species of rattans. Some findings on multiple shoot induction and proliferation in the two species, *C.thwaitesii* and *C.zeylanicus* are presented.

The excised zygotic embryos of both species were cultured in a modified Y3 medium supplemented with 5 or 8 mg l^{-1} 6 Benzylaminopurine. They were transferred to fresh medium 2 to 3 months later and thereafter at 4 to 6 week intervals. Half of the *C.thwaitesii* seedlings that germinated were transferred to the same media supplemented with activated charcoal. The embryos germinated into single plantlets initially. Highest germination of 98% was in embryos of *C.thwaitesii* excised from soft seeded fruits. In *C.zeylanicus* embryos that were excised from hard seeded fruits, germination was 24%. On repeated transfer to fresh medium, both species were induced to develop multiple shoots. *C.thwaitesii* took over 9 months to develop multiple shoots after decapitation and incision of the shoot tip. *C.zeylanicus* took 3 months to induce multiple shoots in the same medium. In both species relatively high levels of BAP at 5 and 8 mg l^{-1} were required for induction. Vitrification was seen in some shoots but these recovered on repeated subculture. Charcoal reduced rate of