

B-47: Propagation of *Schumacheria castaneaefolia* Vahl. (Dilleniaceae)

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A propagation method was investigated for an endemic pioneer tree, *Schumacheria castaneaefolia* (Kekiriwara), found in the disturbed areas of the lowland rain forests in Sri Lanka. Vegetative propagation using stem and root cuttings and seed germination were studied.

Three sizes of stem diameter (5 - 10, 10 - 15 and 15 - 20 mm), 3 substrates (loam, sand and forest soil) and 2 hormonal treatments (with and without) were arranged in a Randomized Block Design in a greenhouse.

Freshly fallen seeds were subjected to 5 different treatments: soaking in water for 48 h and control, exposure to sunlight for 10 days and control, exposure to temperature fluctuation for 3 days and control and application of gibberelic acid for 24 h and control.

Statistically significant ($P \leq 0.05$) differences were observed in sprouting (i) among substrates where sand showed the highest performance (22.2%) followed by that in forest soil (13.88%) and loam (4.147%) and (ii) among diameter sizes. 16.66, 13.88 and 9.73% sprouting were observed in stem cuttings of diameter ranges 5 - 10, 10 - 15 and 15 - 20 mm respectively.

Adding the hormone Rootone F showed no significant difference ($P \leq 0.05$) in sprouting. However, stem cutting treated with rooting hormone gave rise to more roots than untreated cuttings. Sprouting of root cuttings were less successful than stem cuttings. Seeds did not germinate in any of the treatments, which mimic the conditions prevailing in disturbed natural forests.