B-35: Organogenesis of satinwood (*Chloroxylon swietenia*) through leaf callus

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Satinwood (*Chloroxylon swietenia*) is a high value timber tree species mainly grown in the dry zone in Sri Lanka. The wood produces very high quality timber with the characteristics of hard, heavy wood and fine sheen. Therefore, this timber is in high demand in the furniture making industry. However, the population of this species is deteriorating due to limited natural regeneration and unorganized logging. Hence a propagation method to produce a large number of plants should be developed before this tree becomes extinct.

Immature leaf pieces of satinwood were exposed to callus induction medium of MS with 2 mg/l 2,4-D and kept in total darkness. Calli produced from this medium were cultured on hormone free MS medium and exposed to light intensity of 60 $\mu E\ m^{-2}\ S^{-1}$. After one month they were transferred to media combinations of 0.0, 0.05, 0.5, 1.0, 2.5, 5.0 and 10.0 mg/l BAP and 0.0, 0.05, and 0.5 NAA and continued to keep in the same light intensity.

Calli which were cultured on MS medium supplemented with 1mg/l BAP produced shoot like structures after one month from establishment on the same medium. These structures continued to grow and produced shoots similar to the mother plant.