



In vitro germination and buds induction and proliferation from excised embryos of rattan (*Laccosperma secundiflorum* Wendl and *Eremospatha macrocarpa* Wendl)

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1 SUMMARY

Laccosperma secundiflorum and *Eremospatha macrocarpa* are two rattan species particularly recalcitrant to regeneration by seed. This study aims to propose efficient micropropagation media for rattan seedlings regeneration. Excised embryos derived from mature seeds were placed onto seven basal and modified germination media. The obtained shoot buds were then transferred on six micropropagation media for subsequent multiple buds formation. Results showed that the embryos of both species have germinated after 20 days of incubation, whatever the germination medium. Embryos cultured onto MS basal media containing gibberellins (GA₃) 3.46 10⁻⁴ g l⁻¹ and 3.46 10⁻³ g l⁻¹ respectively, developed normally, compared to those without any growth regulator, regardless the species. Concerning the process of micropropagation, collar regions cultured on MS medium supplemented with 4 mg l⁻¹ BAP + 1 mg l⁻¹ IBA or NAA exhibited the highest frequencies of shoots regeneration and the highest average number of shoots (five shoots) per explants for *L. secundiflorum*. With *E. macrocarpa*, 1 mg l⁻¹ IBA or NAA + 2 mg l⁻¹ BAP gave the best results (three shoots per explants).
