

**B-65 : STUDY ON NODULATION AND DI-NITROGEN FIXATION OF
Pericopsis mooniana THW. (LEGUMINOSAE)**

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Pericopsis mooniana is an important indigenous timber tree species which has a good potential for reforestation. In the present study the native rhizobial strains with high N₂ fixing ability and infectivity obtained from *Pericopsis* were studied.

Root isolates of *Pericopsis mooniana* cultivated at Badagamuwa Forest Plantation were phenotypically characterized and identified. Eighteen isolates obtained from *Pericopsis* were used for this study.

The isolates were authenticated using the original host and the broad spectrum test plant Siratro. Eighty eight percent of the isolates and the test strain (KULGP) formed nodules on *Pericopsis* as well as on Siratro. Isolate BM 10 appeared to be specific to Siratro while BM4 was specific to *Pericopsis*.

The nitrogenase activity increased with incubation time. Also there were significant differences between the strains. The nitrogenase activity observed 1 hr. after incubation in the cut plant assays was higher compared to the measurements made *in situ*. But after 2 hours of incubation *in situ* samples showed higher activity. Based on N₂ fixing properties, 4 strains were selected as highly infective and effective.