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COMPARATIVE STUDIES ON BIODIVERSITY OF LOGGED AND UNLOGGED MAHOGANY PLANTATIONS IN KUMBALPOLA, SRI LANKA

A PROJECT REPORT PRESENTED BY

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to the Board of Study in Plant Sciences of the

POSTGRADUATE INSTITUTE OF SCIENCE

in partial fulfillment of the requirement for the award of the degree of

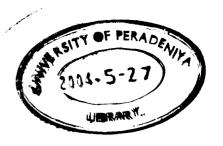
MASTER OF SCIENCE IN BIODIVERSITY CONSERVATION MANAGEMENT

of the

UNIVERSITY OF PERADENIYA

SRI LANKA

2003



ABSTRACT

COMPARATIVE STUDIES ON BIODIVERSITY OF LOGGED AND UNLOGGED MAHOGANY PLANTATIONS IN KUMBALPOLA, SRI LANKA

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Sri Lanka is considered as one of the 18 major biodiversity hot spots in the world. With the drastic reduction of natural forests in Sri Lanka, this valuable biodiversity is in danger due to the destruction of natural habitats. As an alternative to the reduction of natural forests, the Forest Department decided to establish forest plantations in unproductive lands. Although the main target of establishment of forest plantations is to fulfill the present and future timber needs, now it can be clearly seen that some of them have also a biodiversity value. Mahogany plantations are a very good example of biodiversity rich forest plantations. Various factors contribute to this rich biodiversity in Mahogany plantations.

There is some concern that the management practices of Mahogany plantations, proposed by the Forest Department, may affect their biodiversity adversely. On the other hand there is no reliable information about the biodiversity of Mahogany plantations and the effect of management practices on them. This research aimed at evaluating the biodiversity of Mahogany plantations and attempt to understand how the management practices affect biodiversity in them. This research revealed that the biodiversity of Mahogany plantations are considerably high and valuable in many ways. Some endemic species, rare species, medicinally and economically valuable plant species are represented in their diversity. The research also revealed that various kinds of management practices that are being implemented in Mahogany plantations may cause some changes in biodiversity. The data gathered proved that, if the

management practices enforced are able to create a very good "interspersion", within the Mahogany plantations, it greatly increases the animal diversity.

This research showed that the conservation of biodiversity in Mahogany plantations is possible provided due consideration is given to implementing suitable management practices of them.