

STAND CHARACTERISTICS OF LOAGAN BUNUT PEAT SWAMP FORESTS

Jusoh, I¹, M. Demies.², I. Ipor¹, C. S. Tawan¹ and P. Bulan¹

¹Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak.

²Sarawak Forestry Corporation, 93450 Kuching, Sarawak.

Abstract

*The horizontal structure of the Loagan Bunut peat swamp forests \geq 5cm diameter at breast height (DBH) was studied to better understand the current status of the forest. The stand density, basal area and diameter distribution structure were assessed for all species. Forest sampling was done in three different sites representing three forest types. A total of 87 tree species was recorded from the three sites. Results show that the most common species are *Shorea albida*, *Litsea crassifolia*, *Combretocarpus rotundatus* and *Dactylocladus stenostachys*. Other tree species that are usually found are *Dyera polyphylla*, *Copaifera palustris* and *Craytoxylum glaucum*. Diameter size for all species followed the reverse-J curve indicating a good overall forest regeneration. However, individual tree species such as *Shorea albida* did not necessarily possess the reverse-J curve, suggesting irregular regeneration. Heavy forest disturbance such as extensive logging and clearance could deplete *Gonystylus bancanus* trees. The peat swamp forest could naturally recover provided forest disturbances are minimal. However, concerted efforts should be made to ensure the future survival of *Gonystylus bancanus* in this forest. Nevertheless, long-term studies are necessary to understand the ecological trends and traits of the Loagan Bunut peat swamp forest.*

INTRODUCTION

Management of peat swamp forests (PSF) in Loagan Bunut National Park (LBNP) is constrained by limited understanding of the state and conditions of these forests in terms of structure, composition and regeneration status. Hence, achieving sustainable forest management is difficult in absence of a firm scientific knowledge and basis. PSFs of Sarawak have been extensively logged and cleared for agriculture and other development projects and LBNP houses one of the few remnants left of Sarawak's unique PSFs (Hazebroek and Abang Kassim, 2000). In LBNP, the principal threats to the PSF include clearance for agriculture and over-exploitation. The survival of PSF is threatened despite the fact that precise information on the size and distribution and their