STAND DYNAMICS OF Dipterocarpus zeylanicus Thw. PLANTATION AT KIRIGALA, INGIRIYA

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Dipterocarpus zeylanicus is an endemic tree found in lowland rain forests in Sri Lanka. D. zeylanicus plantations have been established in several districts in Sri Lanka by the Forest Department. The Hora plantation in Kirigala, Ingiriya, and the present study site was established in 1940 by the Forest Department. This study aims to investigate the stand dynamics of D. zeylanicus and its regeneration trends.

The 31 main plots of 10m x 10m, subplots of 5m x 5m and 2m x 2m that were used in 1998 to record the trees, saplings & seedlings numbers and the stand parameters were used in this study as well in 2003.

The results show 515 trees, 789 saplings and 551 seedlings. It is less than that what was recorded in 1998, except the number of trees has increased by approximately seven percent. The mean height, diameter at breast height and basal area of *D. zeylanicus* within the study site were 22 m, 31.4 cm and 0.0103m^2 respectively. A significant increase in height of *D. zeylanicus* trees and a reduction in seedlings were observed. *Ochlandra stridiula* is gradually invading the plantation and affecting the stand dynamics of the *D. zeylanicus*.