

**B-104 : SEEDLING GROWTH OF *Shorea* spp. (SECTION DOONA)  
UNDER DIFFERENT LIGHT REGIMES**

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*Shorea* species which dominate the rain forest canopy, hardly ever grow in disturbed, highly degraded, exposed sites. Light, among other factors, may contribute to its absence outside rainforests. This study examined the seedling response of 4 *Shorea* spp. to 3 light intensities (deep shade, medium shade, and full sun ie. 50, 350, and 2000 .. moles m<sup>-2</sup> s<sup>-1</sup>) and 2 light durations (2 and 6 h per day), when water was not limiting.

For all species except *Shorea congestiflora* plant height decreased in the order 2 h light, 6 h light, full sun, medium shade, and deep shade treatments. In *Shorea congestiflora* plant height decreased in the order given above but with one exception. It performed better in medium shade than full sun.

For all species, total number of leaves per plant showed the most increase in the 6 h light treatment. In *Shorea affinis* however, the full sunlight treatment was as effective as the 6 h light treatment.

The number of additional leaves put on between sampling periods indicate the degree of flushing and was best in the full sunlight treatment for all species except in *Shorea gardneri* where the flushing was best in the 6 h light treatment.

This study identifies the best light requirements for growth of *Shorea* seedlings and provides valuable information for introducing them into mixed species plantations and for silvical manipulations of natural forests to enhance their natural regeneration.