

PHENOLOGY OF SOME SHOREA SPP. (DIPTEROCARPACEAE)  
IN THE SINHARAJA FOREST

K. Yakandawala, I.A.U.N. Gunatilleke and C.V.S. Gunatilleke,  
Dept. of Botany, University of Peradeniya.

In Sri Lanka, almost all Shorea species dominate the rain forest canopy where they co-exist and are endemic to the island. However, there appears to be very little hybridization among them. This study attempts to understand how the identity of each species is maintained and to gain an insight into their breeding biology. The time, duration and frequency of flushing, flowering and fruiting and the degree of phenological synchronization within and among species for 7 shorea species from 1988-1991 was examined by visual observations of three crowns and corolla collections in a few selected trees.

Populations of S. trapezifolia, S. congestiflora and S. stipularis flushed continuous and synchronized among individuals within each population. These species flowered annually, between September to June, commencing with S. congestiflora and ending with S. trapezifolia. The remaining flowered sequentially during these months. Flowering at the population level varied between 1-10 weeks. 1989 was the best flowering year.

In S. congestiflora fruit matured over 7-8 weeks, and in the rest between 5-7 weeks. Ripe fruits were dispersed between May to December. S. cordifolia, S. megistophylla and S. disticha, whose fruit are heavily predated fruited together, enabling some to escape and ensuring their species survival. These results while providing some basic information for tree selection and forest management programmes would also be useful for domestication and conservation of these species.

This project was funded by a grant from US/AID subcontracted through Harvard University, USA and administered through NARESA, Sri Lanka.