

B-33: Reproductive biology of *Schumacheria castaneaefolia* Vahl (Dilleniaceae)

K G T N Kiriella¹, B M P Singhakumara²

(¹Central Environmental Authority, Maligawatte, Colombo 10, ²Forestry Project, Dept of Botany, Univ of Sri Jayewardenepura)

The tropical moist forest are subjected to natural and other disturbances which lead to a formation of gaps. These gaps are rapidly colonised by pioneer tree species which have adaptive characters. Recognition of these characters will be valuable for the scientific management of natural forests and restoration of degraded moist forests.

In this study, preliminary information on reproductive biology, of *Schumacheria castaneaefolia* (Dilleniaceae), an endemic pioneer tree has been gathered.

The study was conducted in a logged area at Sinharaja (MAB) forest reserve. Phenological observations showed that it has continuous flushing, flowering and fruiting. Opening of flower occurs in the morning. Anther dehiscence, stigma receptivity and fragrance eminence take place more or less around the same time. Flowers produce large number of yellow sticky pollen. Bees (*Amegilla scintillans*, *Apis cerana*) seem to be effective pollinators. Eight pollination treatments used in this study showed that both cross and self pollination result in successful fruiting.

The fruit of *S. castaneaefolia* is a follicle that has 3 carpels. The seed is small and has a hard seed coat with gelatinous aril. Flowing water acts as a dispersal agent. Seeds, subjected to different treatment did not germinate during the observed period. Seedlings and saplings of *S. castaneaefolia* showed a considerable growth increment during the period of 7 months. *S. castaneaefolia* is used for fuelwood and pole size timber for house construction. It can be used as a shade tree for plants grown in degraded areas.