

A CASE STUDY: DISTRIBUTION OF *Gonystylus  
bancanus* (Miq.) Kurz IN KLIAS  
FOREST RESERVE

TAMBAKAU @ PAUL BIN ANAK

PERPUSTAKAAN  
UNIVERSITI MALAYSIA SABAH

SEKOLAH SAINS DAN TEKNOLOGI

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UNIVERSITI MALAYSIA SABAH

**ABSTRACT****A CASE STUDY: DISTRIBUTION OF *Gonystylus bancanus* (Miq.) Kurz  
IN KLIAS FOREST RESERVE**

The study is carried out in Klias Forest Reserve (Class I protection forest reserve), a peat swamp forest of approximately 3,620 hectare of area, to investigate the tree stand and composition, occurrence in different forest canopy density and surface elevation, and evaluate the species health. Line transects were established in three different location and at each transect site, Global Positioning System (GPS) coordinate were recorded. Transects location coordinates are at N05°16.157, E115°37.075 (transect North), N05°17.106, E115°37.380 (transect Centre), and N05°19.155, E115°38.555 (transect South). GPS coordinate of transects locations in Global Information System (GIS) forest canopy density map and GIS surface elevation map are then determined. Transect design was a straight line transect of 220m in length and 20m wide. Transects are then divided into 11 sub-plots of 20mx20m dimension. Result shows that highest occurrence of Ramin tree stand is in transect Centre followed by in transect South and no Ramin trees found in transect North. Mature bigger and small young trees are also found in higher number in transect North than in transect South. Young trees and saplings dominates composition of tree stands in both transects Centre and South with no intermediate size of trees being found signifying huge generation gap. There is an opposite trend between vegetation cover and number of Ramin tree stand. The trend indicates high density of forest canopy does not necessarily accommodate high number of Ramin trees. Ramin trees are found to exist in one transects but are absence in the other although level of forest canopy density is the same. At higher level of forest canopy density, Ramin tree stands are lesser than at lower level of forest canopy density. These findings signifying the difference in species composition in the different part of forest reserve. Ramin tree is absence in transect North at highest surface elevation of forest reserve. The occurrence of young Ramin trees is higher at elevation of 5-6m than at elevation of 4-5m is observed. Canopy condition evaluation reveals that Ramin trees canopy at investigated areas found to be in good condition.

