

Phenology of *Gonystylus bancanus* in Pahang, Peninsular Malaysia.

ABSTRACT

A study on the phenology of *Gonystylus bancanus* (ramin melawis) was conducted in Pekan Forest Reserve, Pahang, Peninsular Malaysia, which covers areas of virgin and logged-over forests. Observations revealed that the flowering of *G. bancanus* was supra-annual. The smallest *G. bancanus* tree to flower was 29 cm in diameter at breast height (dbh) and was located in a logged-over site. Most trees that flowered had larger dbh of more than 40 cm and were found in logged-over and virgin forests. A total of 71-86 days was recorded for full development from the budding stage to mature fruit formation. The budding phase was quite long, extending for more than a month. However, it took only about two weeks for the flowers to become fruits. The flowers of *G. bancanus* were pollinated by thrips (*Heterothrips* sp.) and stingless bees (*Trigona canifrons* and *T. laeviceps*), while aphids (*Aphis* sp.), Prevost's squirrels (*Callosciurus prevostii*) and plantain squirrels (*C. notatus*) were identified as predators of *G. bancanus* flowers and fruits. *Gonystylus bancanus* seeds were mainly dispersed by gravity but the Malayan flying fox (*Pteropus vampyrus*) was also observed to disperse the fruits. Other fruit bats, namely, *Cynopterus sphinx*, *Megaerops ecaudatus* and *Penthetor lucasi* were also identified as potential seed dispersal agents of *G. bancanus*.

Keyword: *Gonystylus* phenology; Flowering; Fruiting; Pekan Forest Reserve; Pollinators; Predators.