

Panumas Jansuwan 2007: Species Diversity and Habitat Suitability Assessment for Genus *Ficus* in Mae Klong Watershed Research Station, Amphoe Thong Pha Phum, Changwat Kanchanaburi. Master of Science (Forestry), Major Field: Forest Biology, Department of Forest Biology. Thesis Advisor: Assistant Professor Dokrak Marod, D.Sci. 152 pages.

The Species Diversity and Habitat Suitability study for Genus *Ficus* were carried out in Mae Klong Watershed Research Station, Amphoe Thong Pha Phum, Changwat Kanchanaburi during on October 2005 to September 2006. Five rode lines were set up for data collecting with the total distance about 25 kilometers. Those lines were designed to cover all the main habitat types including Mixed Deciduous Forest (MDF), Dry Evergreen Forest (DEF), Deciduous Dipterocarp Forest (DDF), and old shifting farm land. All figs which located along the line, 10 meter width, were recorded including the physical data (Elevation, slope, aspect, soil properties, forest type and distance from water resources). The specimens were collected and identified by considered the morphological characters. Full descriptions with dichotomous keys were constructed to species and applied the geographic information system (GIS) to search for the figs suitable habitats by overlay technic.

The results showed that twenty two species with six subgenera of figs were found in the area in with 10 species existed in subgenus *Urostigma* (Gasp.) Miq., 7 species in subgenus *Sycomorus* (Gasp.) Miq., 2 species in subgenus *Synoecia* (Miq.) Miq. and one species were found in subgenus *Ficus*, *Pharmacosycea* (Miq.) Miq. and *Sycidium* (Miq.) Mildbr. & Burret, respectively. Two species were introduced from other areas, as *Ficus elastica* Roxb. and *F. benjamina* L. and the result from GIS technic devided the suitable site for *Ficus* into two group; (1) moisture-specific group, such as, *Ficus callosa* Willd., *F. ischnopoda* Miq., *F. montana* Burm.f., *F. squamosa* Roxb. and *F. fistulosa* Reinw. ex Blume, and (2) non specific-factor group, such as *F. hispida* L.f. and all species in subgenus *Urostigma* (Gasp.) Miq., this group had developed the sunken stomata to protect the water losing for surviving during the dry season. The results can apply for planning to conservation on plants and wildlife and also this study is the pilot study on biodiversity research wich may apply to other plants

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