

**Structural characteristics of the Dry evergreen forest at Sakaerat Environmental  
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**ABSTRACT**

Studying of structural characteristics of the dry evergreen Forest at Sakaerat Environmental Research Station had been collected in area 1 Km<sup>2</sup>. Ninety sample plots were placed systematically with 100 m. apart. Each sample plot was subdivided into five 10 x 10 m. subplots. One each of 4 x 4 m. and 1 x 1 m. plot were placed at the center of which subplot. In 10 x 10 m. subplot all tree species which diameter at breast height of 10 cm. and above were measured. All tree species which diameter at breast height less than 10 cm. were measured in 4 x 4 m. plot, trees which height less than 1.3 m. were counted in 1 x 1 m. plot.

An ordination technique was used to classify the dry evergreen forest at Sakaerat into three subcommunities; *Hopea ferrea* – *Hydnocarpus ilicifolius* – *Memecylon* spp. subcommunity, *Hopea ferrea* – *Hydnocarpus ilicifolius* – *Walsura trichostemon* subcommunity and *Lagerstroemia duperreana* – *Hopea ferrea* - *Memecylon* spp. subcommunity. Basal area and density of the three subcommunities are 56.17 m.<sup>2</sup>/ha and 476 trees/ha, 65.65 m.<sup>2</sup>/ha and 500 trees/ha, 129.06 m.<sup>2</sup>/ha and 726 trees/ha respectively.

Eighty-seven tree species which diameter at breast height of 10 cm. and above were found in this study area. Most ecological importance tree species is *Hopea ferrea* Pierre. The less importance species are *Hydnocarpus ilicifolius* King, *Walsura trichostemon* Miq. , *Memecylon geddesianum* Craib, *Memecylon ovatum* J.E. Smith and *Linociera microstigma* Gagnep. respectively.

In ordination diagram the tree species such as *Hopea ferrea* Pierre, *Shorea henryana* Pierre and *Lagerstroemia duperreana* Pierre are slightly associated with each other. The dominant trees in middle layer such as *Hydnocarpus ilicifolius* King, *Memecylon ovatum* J.E. Smith, *Walsura trichostemon* Miq. and *Memecylon geddesianum* Craib, are closely associated with other tree species and also closely associated with *Hopea ferrea* Pierre, *Lagerstroemia duperreana* Pierre and *Shorea henryana* Pierre.

The Shannon – Wiener index of diversity of trees which diameter at breast height of 10 cm. and above is 4.46 and tree dbh less than 10 cm. is 4.52 .