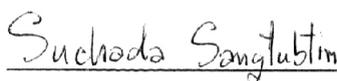
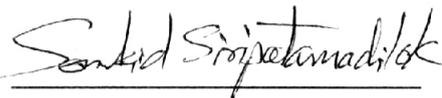


Suchada Sangtubtim 2008: Development of Flower and Fruit of Kraitsana (*Aquilaria crassna* Pierre ex Lec.). Master of Science (Forestry), Major Field: Forest Biology, Department of Forest Biology. Thesis Advisor: Associate Professor Somkid Siripatanadilok, Ph.D. 66 pages.

The study of development of flower and fruit of Kraitsana was investigated from three trees standing in Khao Yai national park. The study included development of flower and fruit, morphology of flower and fruit, anther dehiscence and female receptivity time, and the estimation of outcrossing level, fruit set efficiency and reproductive success. The field study was carried out from January 2006 to December 2007.

Floral development of Kraitsana from young bud to anthesis took 20 – 30 days. The flower was a complete flower type, inflorescence was an umbel type. Anthesis started from outside to inside of the inflorescence. The anthesis began at 6 pm. The flower was protandry in which the anther matured before the stigma. The stigma was wet type and capitate shape, composed of glandular trichrome and papillae at the surface. Dehiscence of stamen was longitudinal. Pollen was monad, circular shape and its size was 20 – 25 μm . The outer most surface of pollen covered with reticulate layer. The development of fruits from flower anthesis to fruits mature took approximately 11 weeks. The receptive period of stigma suitable for controlled pollination was from 6 pm. to 9 pm. The fruit was fresh loculicidal capsule. The ratio of pollen grains to ovules for one flower (P/O ratio) was $9,685.5 \pm 92.80$ which was classified as obligate xenogamy. The fruit set efficiency was 3.55 – 6.35 %. The reproductive success was 0.048.


Student's signature


Thesis Advisor's signature

8 / 04 / 08