

Mapping distribution of Dipterocarpus in East Kalimantan, Indonesia

Abstract

Dipterocarps (Dipterocarpaceae) is a dominant tree family of tropical rainforest in Southeast Asia. Dipterocarps have been exploited for its timber and disappearing fast in East Kalimantan. In this study, we predicted the distribution of dipterocarpus, one of the main dipterocarps genera, by evaluating its habitat suitability using logistic regression analysis with specimen collection points and environmental factors from GIS data. Current distribution of dipterocarpus was generated by combining the habitat suitability classes with an updated forest cover map. Rainfall, soil type, followed by elevation was the main factors that influence the distribution of dipterocarpus in East Kalimantan. Dipterocarpus can be found in a quarter of the current forest cover, which is highly suitable as habitat of Dipterocarpus.