Abstract

This study monitored characteristics of plant community structure of a natural dry dipterocarp forest and forest restoration areas planted with either teak or dipterocarp seedlings infected with ectomycorrhiza in the Chulalongkorn University-Saraburi Area, Kangkhoi District, Saraburi Province. Twenty-four trees of 3 species, namely: *Dipterocapus siamensis*, *Wrightea arborea* and *Strychnos nux-vomica* were recorded in the natural dry dipterocarp forest plot. These trees are small, with 2.9-16.5 cm DBH, and the calculated aboveground biomass of tree and ground cover layers was 53.01 ton/ha, suggesting that the forest was recovering from previous disturbances. The teak restoration plot contained 9 teak seedlings, all of which survived through the March-September 2014 study period. The diperocarp restoration plot was transplanted with seedlings of *Hopea odorata* and *Dipterocarpus alatus*, with the survivorship rates of 89 and 64 percent, respectively. Both restoration plots were covered with 0.19-1.81 ton/ha aboveground biomass of ground cover vegetation. Soil physical factors and nutrient amounts varied among different plots. Monitoring the changes in plant community structure will indicate the outcome of forest restoration efforts.

Keywords: plant community structure; ecosystem restoration