

CRC 990 Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems Sumatra, Indonesia



Plant genetic diversity in tropical lowland rainforest transformation systems (Sumatra) **Natalie Breidenbach, Reiner Finkeldey** Iskandar Z. Siregar, Sri Rahayu, Hamzah Saidina

Is the intraspecific genetic plant diversity associated with the plant species diversity ?



Tropical rainforests are converted to other types of land use throughout the globe. The transformation of natural ecosystems to managed systems frequently results in a loss of species diversity. This project explores intraspecific genetic diversity of vascular plants in reference forests and the three mentioned transformation systems. Based on anonymous AFLP markers we aim to assess the consequences of land use changes on the genetic diversity of plants caused by the different species composition in each system.

In 32 plots (50x50m) of these four different ecosystems, 10 individuals of 10 dominant species are sampled.





Jungle Rubber

Rubber Plantation

Oilpalm Plantation

Forest

8 Rubber Plantations, 6 Oilpalm plantations, 7 Jungle Rubber and 1 Forest Plot are sampled.2200 samples are in Germany for AFLP analysis. 1980 herbarium specimen are stored in Jambi University.





Randomly chosen order of positions using the Bitterlich Method to (modified) to determine the dominant species in the Forest and Jungle Rubber Plots.

