

Institute: Institute of Botany

Topic: Differentiation of wild plant consumption patterns in various ethnic groups in Indonesia

Name of supervisor: prof. dr hab. Marcin Nobis
m.nobis@uj.edu.pl

Background information:

The Bukit Barisan are the mountain backbone of Sumatra, that divides the island into two parts. This mountain range is characterised by a high species richness, as well as a high number of endemic and endangered plant species. The Bukit Barisan Mountains have been also subjected to intense human pressure. Deforestation due to illegal logging and cultivation results in the loss of species diversity. Deforestation not only affects the landscape but also threatens the lives of local communities whose livelihoods depend on forest resources. Forests are very important to local communities, because of their function in fulfilling life needs. One of the most affected areas is eastern Sumatra, which contains the Aceh and North Sumatra provinces. Knowledge of local communities about useful plants has developed for a long time and has been passed down from generation to generation until now. However, although the local communities around Bukit Barisan Mountains have a rich culture, the availability of natural resources is constantly diminishing. So, there is a need to record this local knowledge to preserve it before it vanishes or the biodiversity declines or collapses. Ethnobotanical studies on useful wild plants in eastern Sumatra are, however, still neglected.

Information on the methods/description of work:

Field research will be conducted in the lowland and mountains of Northern Sumatra (Indonesia). Data and samples will be collected from North Sumatra (Mandailing Natal, Karo, Tapanuli, and Samosir). Data will be collected by conducting open-ended, semi-structured interviews with key informants and respondents -Indigenous peoples. Data collected in the interviews will include the diversity of food plant species in the market, harvesting locations, parts utilised, processing methods, frequency of utilisation, market price, and other uses. Particular plants will be identified in the laboratory and preserved in a herbarium (as documentation). Statistical analysis will be performed using R and/or Statistica software.

The main question to be addressed in the project:

What is the diversity of plants sold in the local markets?; Which plants are considered important by local communities?; For which purpose do people use particular species of wild plants? Do different ethnic groups use the same plants in the same way?; Are endangered species sold on the market?

Additional information A potential candidate should possess knowledge and experience in designing and conducting interdisciplinary research. Excellent written and oral skills in English language are required.

Name of foreign collaborator:

Prof. Fitmawati Fitmawati, Universitas Riau, Indonesia.

References:

- [1] Neuman, W.L. 2003. Social Research Methods Qualitative and Quantitative Approaches. New York (NY): Allyn and Bacon.
- [2] Kang, Y., Łuczaj, Ł., Kang, J., Wang, F., Hou, J., Guo, Q. (2014). Wild food plants used by the Tibetans of Gongba Valley (Zhouqu county, Gansu, China). Journal of Ethnobiology and Ethnomedicine, 10(1), 20.