Ethnobotanical Contributions to Safeguard Biodiversity and Preserve Indigenous Knowledge in Mountainous Regions of South-East Asia

Pavlos Georgiadis

Abstract

Climate change, population growth and persistent poverty are applying pressure to the world's most fragile ecosystems and biodiversity hotspots in unprecedented ways. There is an urgent need to document plant species that provide important ecological services and contribute to human health and well-being. This research uses Participatory Rural Appraisal tools and collections of herbarium specimens to elicit ethnobotanical knowledge of ethnic communities in mountainous regions of southeast Asia. These are backed by statistical analyses on the basis of quantitative indices to rank the cultural significance of the recorded plant species. This leads to ethnobotanical inventories and a prioritisation of culturally important tree species on the basis of four quantitative indices. Most of the reported plants are neglected and underutilised in need of further research and development for the diversification of agriculture, diets, livelihoods and landscapes. The integration of cultural criteria in the selection of framework species for ecosystem restoration embeds local community needs and indigenous knowledge in conservation efforts, increasing their potential for success and fostering an integrated approach to sustainable development.