

**PABITRA Network for Collaborative Research on the
Ecology of Global Change in Island Landscapes of the
Tropical Pacific (APN 2003-06)**

Project Leader:

Prof. D. MUELLER-DOMBOIS
University of Hawai`i Botany Department
3190 Maile Way, Honolulu, Hawai`i 96822
USA
Tel: +1-808-254-1873
Fax: +1-808-956-3923
Email: amdhawaii@aol.com

PABITRA Network for Collaborative Research on the Ecology of Global Change in Island Landscapes of the Tropical Pacific (APN 2003-06)

APN funding:

US\$ 31,815

Participating countries:

Participants from the following countries were funded: Fiji, Japan, New Zealand, Pacific Island Countries (Guam, Samoa), USA (Hawai`i). Most of the funds were from APN. Contributory funding was received from the National University of Samoa, from the New Zealand High Commission in Samoa, and from two private sources.

Brief introduction and background:

The **Pacific-Asia-Biodiversity Transect Network** is a program of the Ecosystem Division in the Pacific Science Association (PSA) Task Force on Biodiversity. Its aim is to collaborate with resident Pacific Islanders on biodiversity research and ecosystem conservation. Its research strategy is two-fold: to encourage comparative studies across Oceania in ecosystems that belong to the same biomes (the horizontal strategy) and to study selected island landscapes from the mountains to the ocean (the vertical strategy). After establishing the "Gateway Transect" in Fiji during 2002 and conducting the PABITRA Symposium/ Workshop on "Island Landscapes under Global Change" at the Pacific Science Congress in Bangkok, March 2003, PABITRA received continued funding from APN.

Outline of activities conducted:

During 2003, PABITRA activities focused on Samoa. An Initial Synthesis Meeting was arranged by Dr. Nat Tuivavalagi at NUS, the National University of Samoa in Apia, in June 2003. This was followed by a Joint Analysis and Biodiversity Field Training Workshop in Samoa from November 25 to December 5, 2003. The workshop began in November 25 with Dr. Art Whistler presenting an illustrated talk on the vegetation of Samoa. The open forum continued throughout the next day with PABITRA-related presentations. They included three experts each from Fiji and Samoa, one each from Guam and Japan, and five from Hawai`i. These meetings drew about 40 participants, many of whom got involved in discussions. The following week was spent in Savai`i with a group of ten pre-selected Samoan students and government officers and ten overseas collaborators. Here, we visited three mountain-to-ocean landscape transects, designated as Matavanu, A`opo, and Taga. We also visited the twice hurricane ravaged Falealupo forest reserve at the north-western tip of Savai`i. We stayed two nights each in three coastal villages, where we were received welcome ceremonies by the villagers. We explained the PABITRA objectives to them and, thereafter, received permission to access their land.

Outcomes and products:

In the field we discussed and exercised a number of biodiversity assessment techniques at different locations to provide a first hands-on experience for the students. The

landscape approach to biodiversity assessment via ecosystem entitation was clarified in the field by interactive heuristic procedures. The final day was spent entirely at NUS writing and presenting reports. In a closing ceremony Certificates of Participation were handed to the ten Samoan students and government officers after they had given a short oral presentation on their learning experience during the workshop.

This workshop is now summarized on an illustrated two-panel poster on the PABITRA website <www.botany.hawaii.edu/pabitra> under Joint Analysis Workshop together with a student report by Mila Misa. A follow-up report on the 2002-2003 PABITRA activities was presented at the DIWPA¹ meeting in Kyoto in December 2003.

Future directions and follow-up work:

A special session on “Vegetation Ecology in the PABITRA Landscapes” will be conducted during the 47th Annual Symposium of the International Association of Vegetation Science (IAVS) in Kailua-Kona, Hawai`i, July 18-23, 2004 <www.iavs.org>. Funding to invite young scientists from developing island countries has been secured from six sources other than APN. However, a new proposal for continuing PABITRA activities in Micronesia has been submitted and another proposal for PABITRA activities in Eastern Polynesia will be submitted to APN prior to the Call for Full Proposals deadline in September 2004. The focus remains on mutual capacity building of young indigenous scientists for researching and managing their own biological resources for sustainability and to combine this with research on global change as defined by APN.

¹ DIWPA: An international project to understand the latitudinal gradient of marine biodiversity