Some Observations of Carnivorous Plants in Habitat, Sulawesi: Indonesia

By Gary James Orange Coast College 2701 Fairview Road Costa Mesa, CA 92628-5005

During a trip to Indonesia in July, 1992 I travelled to the highlands of the island of Sulawesi (formerly Celebes) in the country of Indonesia. Located at an elevation of 4000 feet, the largest highland city is Rantepao. The inhabitants of this area are called the Toraja people and are famous for their unusual boat shaped houses, rice cultivation and elaborate funeral practices.

The human population of Torajaland is increasing rapidly. As the population increases, less land is available on a per capita basis for providing sufficient food for all of the people. In an effort to reduce the numbers of people, the Indonesian government has embarked on a transmigration project. Toraja people on a voluntary basis are translocated to other less crowded islands in Indonesia such as Iryan Jaya, Borneo and Sumatra. This program together with efforts at family planning has begun to help stabilize the population of Sulawesi.

The climate around Rantepao is relatively mild with cool evenings, warm days and rainfall nearly every afternoon or evening. Rice is cultivated on all the hillsides and valleys. Elaborately constructed terraces cover nearly every square foot of cultivatable land. In order to find any of the original vegetation, it is necessary to climb above the cultivated valleys into the steep limestone mountain slopes where it is impractical to cultivate rice.

On one day during my visit I drove close to the village of Batutumanga at an elevation of 4400 feet. As the road deteriorated, I parked the vehicle near some rice fields and set out walking along a very bad, muddy road to the village. As I approached Batutumanga, scattered groups of trees appeared and some of the natural vegetation was found. Along the I road stopped to admire some ground orchids in bloom and noticed two different *Nepenthes* spp. growing on the side of a small cliff. The soil was quite wet where a spring ran onto the surface and there were many mosses, ferns and other water loving plants. The steepness of the slope was the only reason this small area had not been brought into rice cultivation.

Each of the Nepenthes had very different leaves and pitchers. Growing with them were also some bright red Drosera spp. At a place where part of the cliff had collapsed in recent rains it was possible to find a few examples of the insectivorous plants which were collected. The plants were transported back to the hotel where I was staying. The plants were carefully washed to remove all soil and the leaves and roots were trimmed back. The Nepenthes rhizomes were carefully wrapped in moistened newspaper and somehow survived for nearly two weeks of travel enroute back to the United States. The plants were brought into this country via permits from the United States Department of Agriculture. After unpacking, the plants were packed in wet sphagnum and handed over to Leo Song at California State University, Fullerton, where two of the Nepenthes have rooted in the greenhouse. Unfortunately, none of the Drosera survived the journey home.

It is sad to think that huge numbers of these interesting plants once grew all over the mountains where now rice cultivation occurs. While these plants were observed in habitat during a very short visit to the area, it would certainly be interesting to return and climb higher into the uncultivated hillsides to see what other types of unusual plants might be observed.

Some C.P. from Sulawesi, Indonesia





Nepenthes spps. in habitat in Torajaland, Sulawesi, Indonesia. All photos by author.



An unidentified red *Drosera* growing in Torajaland.