

SOME OBSERVATIONS OF A POPULATION OF *NEPENTHES MADAGASCARIENSIS* IN MADAGASCAR

By Gary James

Orange Coast College, 2701 Fairview Road, Costa Mesa, CA 92626

Madagascar, the fourth largest island in the world, is located about three hundred miles off the east coast of Africa. Geologists estimate that the island has been separated from other land masses for as long as one hundred million years. Because of this long isolation, many unique plants and animals have evolved on Madagascar.

Among the more familiar plants are the travelers palm, *Ravanala madagascariensis*, which is not really a palm but is more closely related to the banana and Heliconia groups of plants. The Madagascar periwinkle, *Vinca rosea*, is used in landscaping, and the pitcher plant, *Nepenthes madagascariensis* is of interest to people interested in insectivorous plants.

The southern part of the island is quite arid and the vegetation of this zone is nicely adapted to the climate. Each year the rainy season begins in December and ends in April with a long generally dry period from May to November. The temperature is mild throughout the year. The above mentioned plants are residents of the southern arid zone, at about 300 feet elevation. Near the town of Fort Dauphin, in southern Madagascar are many eroded hillsides with deep gullies and red sun-baked laterite soils.

The forests in this area have long ago been cleared by cattle herding tribesmen of the Mahafaly people who graze their herds on the sparse grasses which have replaced the forests. Burned every year during the dry season, the flush of new grass provides life sustaining food for the herds of Zebu cattle owned by the local people. The clearing of the trees and the burning of the grass exposes the clay soils to erosion. Gullies channel the hillsides and the exposed soil turns brick hard.

It is in this eroded landscape the *Nepenthes madagascariensis* makes its home. Scattered in dense clumps up to three feet across and twelve to eighteen inches high, the plants are found over a wide area growing among stands of *Ravanala madagascariensis*. The plants observed were healthy with many pitchers at the tips of the leaves. In August during our visit none were observed to be in flower. No doubt, with the advent of the rains in December, the plants will begin to flower. In August the soil was dry and little rain had fallen for many weeks. The pitchers were about one-quarter filled with fluid. A few were tipped out to reveal a large number of insects as well as much decayed material in the bottom of the pitcher.

The area we visited covered perhaps three to four acres, and there were hundreds of clumps of *Nepenthes* as well as many *Ravanala* scattered over the area. The *Nepenthes* were bright green in color and the clumps contrasted markedly with the dry clumps of grass. The hillside faced north so the plants were spared the direct sun and its attendant drying effects. The population was large and healthy. It is an area where tourists stop, adjacent to the main road, en route to a nearby lemur preserve.

Unfortunately, in a poor country like Madagascar there is little incentive to preserve areas such as this. The plants in this particular population are thriving but probably should be afforded some protection from trampling and collecting. There are no doubt many similar areas in the vicinity where these plants may be found. They seem to have adapted well to the harsh conditions on the hills where they live. Hopefully the population will continue to thrive on their southern Madagascar hillsides.

Nepenthes madagascariensis in Habitat



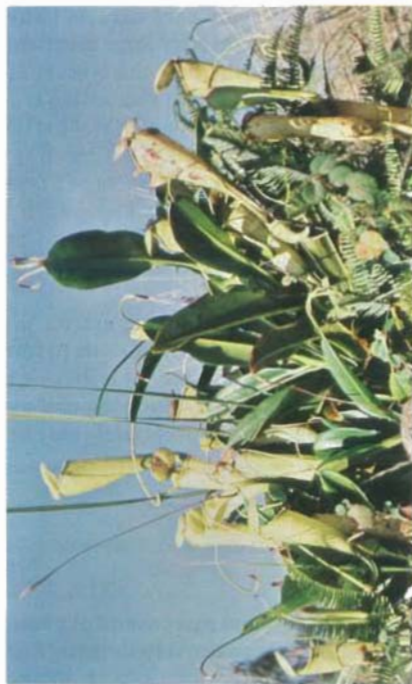
General habitat view.



Another clump of *N. madagascariensis*.



Eroded hillsides in Madagascar with *Ravensia* and *N. madagascariensis*. Photos by author.



Close-up view of clump of *N. madagascariensis*.