A Trip to the Philippines

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Our three week trip to the Philippines was the result of many months planning (involving correspondence back and forth between Australia, Germany and the Philippines), numerous delays, minor obstacles, and a fair degree of research. While the logistics were difficult, by some miracle it all came together midway through 1996. My travel partners were Thomas Alt (with whom I had previously travelled in southeast Asia) and Trent Smith who was living and working in Manila.

I met Thomas and Trent at the Manila airport on 25 September 1996. Thomas had arrived in the Philippines a few days earlier and had already travelled down to Mindanao in the south of the country to check out some good locations for our investigations. Trent was the best of hosts and made us feel at home in the unbelievable city of Manila while we prepared for the first leg of our journey. He also provided us with a useful update on the law and order situation in the parts of the Philippines we were to visit.

Upon our arrival in Davao City, Mindanao, we travelled by jeepney (a modified Jeep) to the town of Magwab, and then northeast to an area we hoped would give us access to high ground and natural forest. As we quickly discovered, natural forest in the Philippines is rare. Less than 5% of the country's rainforest remains untouched by axe or fire. The habitat of many *Nepenthes* species is rapidly diminishing.

While the road we had chosen looked promising on the map, it turned out that it led to a still-operating gold mine, and the security guards refused us entry to scout for plants. As this is sometimes referred to as the land of "Goons, Guns, and Gold" we did not press the point and turned back. Back in Magwab we tried another approach and asked at a local orchid nursery if they knew locations of pitcher plants (referred to locally as the "pitchel pitchel plant"). He replied that he had seen many but they were on the other side of the mountain towards the sea and after a walk of many days. With our enthusiasm severely dented we swapped our jeepney for the bus north to the town of Surigao.

The next day we travelled south to a small village and then set off by foot to climb Mt. Hilong hilong. From the village,



Figure 1: *Nepenthes truncata*



Figure 2: *Nepenthes petiolata.*

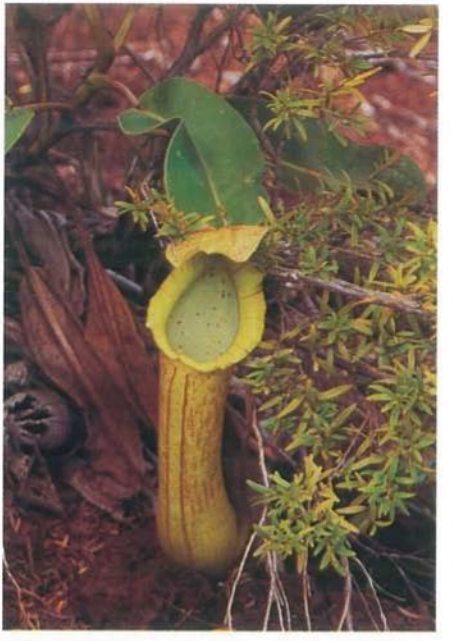


Figure 3: *Nepenthes truncata* × *alata.*



Figure 4: *Nepenthes merrilliana.*



Figure 5: An unknown *Nepenthes* species from Palawan Island.

the climb was along a very steep, open track which offered no shade. It was hot in the full tropical sun, and even our guide felt the heat. At about 1600 m altitude, Thomas found our first *Nepenthes*, a seedling most likely to be *N. alata*. We found more seedlings than anything else, due to the constant slash and burn farming in this area. As a result of this destructive form of farming, the creepers and weeds of the jungle had over taken most of the ground, and only areas of thin cane grass offered habitat where *Nepenthes* seeds could germinate and survive. The constant burning ensures that most adult plants live in a precarious existence.

Inspired by the discovery of our first plants we set off again, finally resting on a ridge in the late afternoon. While we caught our breath our guides returned with two plants in hand. One was a juvenile plant of *N. truncata* about 3-4 years old. It was huge with leaves that were 40 × 40 cm and had a beautiful pitcher 42 cm tall with a striped peristome (Figure 1). The other seedling was of a very hairy plant with dark green thick leaves and a bright red pitcher about 10 cm tall (Figure 2). It was unlike anything I had seen but was a definite highland species and reminded me of a juvenile *N. macrophylla*. I later compared this with the description and especially the drawing of *N. petiolata* in Danser (1928). I am convinced this is the true form of *N. petiolata*, not seen since the early 1900's.

We spent the rest of what was a very wet afternoon in a torrential downpour looking for more plants but only found a few *N. truncata* specimens. The next morning revealed more of the same hidden in the cane grass. We also found what I think was *N. alata*, but the pitchers were so variable and hairy it was hard to be sure. It was while searching through this 3 meter high cane grass that Thomas suffered the bad luck of having one of the grass leaves puncture his eardrum. This accident proved a big problem for Thomas in the following days. With time running out, the increasing heat of the day and the thought of the long hot journey back, we left the mountain to return to our air-conditioned hotel and cold beers in Surigao.

The next day our attentions turned towards the Mt. Legaspi area, a destination that proved to be full of dangers. After our jeepney broke down for the fourth time we told our driver to find us later once his jeepney was repaired, and we hitched a ride with a bus. At the next village, four heavily armed soldiers boarded our bus. Shortly thereafter, when we stopped the bus near an area which looked promising the soldiers became very tense and tried to prevent our leaving. Not understanding their intentions, we disembarked and began exploring the surrounding hills.

The terrain here was not the landscape you would expect to harbor *Nepenthes*. The ground was a very dry powdery red loam, and our feet sank as we walked. There were no trees and the surrounding bushes were stunted, thin and under three meters tall; all looked as though they were suffering with the heat. Erosion cut deep gullies into the sloping hills. In many ways it reminded me of the desert country in Western Australia. Many *Nepenthes* plants survived here, particularly in the gullies where the extra moisture could be found. As we began setting up our cameras, someone not more than several hundred meters away began firing with an automatic rifle. Shots whistled across the valley. With this we headed further around the hills as quickly as we could.

It took some time for our hearts to stop pounding and for our attentions to return to the plants. We found numerous beautiful forms and colours of *N. alata*. Variations in these plants only added to our confusion as to whether they were *N. alata*, *N. petiolata*, or hybrids between the two. The fluid in the *N. alata* pitchers growing in the full sun was actually hot (it must have been 25-30°C and did not burn the plant).

One of our aims for the trip was to find seed, but although we found many plants here none contained mature fruit. Also, it appeared many of the seedlings had perished with the heat. In one of the gullies I found a large *N. merrilliana* × *alata* hybrid plant with huge green pitchers and red peristome; *N. alata* was the predominant parent in this hybrid. Although large its pitchers were plain in colour.

The *N. alata* plants varied in colour from bright green to dark red with brown blotches. Another very nice small plant with large pitchers was *N. truncata* × *alata* (Figure 3). It was struggling against the heat under a sparse bush. Strangely, under these bushes with the *Nepenthes* grew a type of slipper orchid (*Paphiopedilum*).

As we moved further around the hills we realised that that most of the plants were clinging to what little extra moisture remained in the gullies. It was in one of these gullies that we found mature *N. merrilliana* plants. They were impressive with huge leaves 40-50 cm long and 15 cm wide. The largest of the pitchers was 35 cm long and 12 cm wide, and was green with dark red mottling. I found several very good mature seed spikes and this made my day. Although I failed to locate the *N. globamphora* plants that Thomas had previously found in this area, I was happy with the day's discoveries.

The next day we took a different approach in our search for plants. No jeepney this time—instead we tried an outrigger boat. Our guide had convinced us that *Nepenthes* plants could be found on nearby islands, so early in the morning on a flat sea we set out for a two hour voyage. It was extremely pleasant, the water was calm and the breeze was a cool respite. As we neared our destination a coral reef outcrop sheared the propeller off the boat, even though we were still several kilometers from shore. It looked quite amusing that the owner was standing waist deep in water so far from shore. It was a minor job for him and was obviously a common occurrence.

When we arrived the tide was out; this meant wading through the mud of the mangroves. Amazingly, on the shore line behind the mangroves, growing not more than a meter from the salt water level were many large plants of *N. merrilliana* (Figure 4) and *N. merrilliana* × *alata*. This was another area that had been logged hard and burnt so many times that there were no trees remaining—only shrubs 2-3 metres tall remained. The *Nepenthes* were just hanging on to existence and the area gave the impression that in ten years or so, or after several dry years, *N. merrilliana* would disappear and only the stronger hybrids would remain. I managed to collect some seeds and take many photos before the heat got the better of us. We headed back to the mainland to catch a flight back to the smog and crowds of Manila.

The next leg of our trip involved a journey to an isolated island in the central part of Philippines called Sibuyan. Trent had flown over the island a couple of years earlier and was taken with the rugged mountains, and was very keen to travel there. It took us several days to organize a trip to Sibuyan Island, as there was no available information on how to get there. Trent managed to find a newly formed airline that would to fly us to Tablas Island which is near Sibuyan Island. We subsequently departed without Thomas. His ear had become infected and he was ordered by a doctor not to fly. Thomas was not pleased.

After jeepney rides on Tablas Island (some spent sitting on the roof, the best way to ride), we left for Sibuyan Island by ferry. As we approached, I could see how others had described it as 2000 meters of mountain rising straight out of the ocean. Covered in clouds and looking like the picture set for the King Kong movies, it was an impressive site. I was very lucky to have Trent with me; his knowledge of customs and the native languages helped immensely. We docked at the port of Magdiwan and left for the village of Lontok. We met with the village captain and were privileged to be invited to dine with him and camp the night in his house. Unfortunately he informed us that to reach the mountains from his village would involve many days of hiking down and over steep gullies. As we were short of time, we backtracked to a small village close to Magdiwan where we hired guides and porters. We set off with the almost unnerving sight of this steep mountain in front of us. It was not long before we entered what was the closest to real virgin forest we

saw on the entire trip. It was a pleasure to be walking in the forest—even as hot as it was—and we quickly gained altitude. The rain that fell in the next few hours was some of the heaviest tropical rain I have experienced and it gave the forest a strange atmosphere. The strange sounds of the frogs, birds, and other animals added to the prehistoric feeling. When the jungle floor became rainsoaked, bright blue earthworms 25 cm long appeared everywhere.

In time we located the remains of the camp made by an expedition from Kew Gardens some two years before. Not much further on Trent found a *Nepenthes* pitcher. It was an unusually spotted upper pitcher and its stem was trigonal, with corners. The lower pitchers were squat, bulbous, 10-12 cm tall and mostly a deep purple colour. This is possibly a form of *N. alata* but the typical keel under the pitcher lid was missing. This species appeared at about the 1000 m altitude.

After setting up camp in the afternoon, we found *N. sibuyanensis* (see Front Cover). This species has only recently been described (see Nerz *et al.*, 1998). Growing in the steep grassy slopes, we could see its large *Nepenthes* seed racemes, but getting to them was very dangerous. With a great deal of engineering and hanging on tightly to anything he could, Trent manoeuvred out and what he found was amazing. It was obviously a close relative of *N. ventricosa* and *N. burkei* but the pitchers achieved very large proportions. The largest of these pitchers were 25 cm high and 15 cm wide, cylindrical, green coloured with purple flecks and had wavy peristomes similar to that of *N. ventricosa.* The peristome was dark red to purple-black, 2 cm wide and perfectly symmetrical in the mouth shape. This plant was a stunted highland form with grey-green leaves 15-18 cm long, 4-5 cm wide wrapped to the stem and had virtually no internodes. The plants never attained a height over 1.5 m. Hidden among the surrounding shrubs, the pitchers were very rarely exposed to full sun. Later Trent found a plant with pitchers in the full sun and these were vivid red in colour. There were very few plants that could be reached in safety, but we managed to get some good photos and some nearly mature seeds before the fading light sent us back to camp.

The next morning we set off for the grassy slopes of an upper alpine area. The nearly vertical path was tough and perilous. The footing was slippery, and most of the time you could not see your feet in the thick ferns and heath. It was on one of these climbs that I noticed what appeared to be a *Nepenthes* rosette. When I looked closer at this dark green, very hairy plant, I noticed that although the rosette was only 10-12 cm wide it was mature and had a male flower spike and the remains of last year's flowers. These plants appear to send their stems along under the heath for up to a metre before forming the rosette, acting like a rhizomatous shoot. When I lifted out one of the extremely hairy tendrils I knew I had a new species, which was recently described as *N. argentii* (Jebb & Cheek, 1997). The tendrils reminded me of the arms of an orangutan, thickly covered with red-brown hairs. The pitcher was also very hairy and purple brown. It was 4 cm tall, narrow at the base, and widened to 2.5-3 cm at the top with a predominant shoulder just under the peristome. The peristome was finely ribbed, 1-2 mm wide and dark purple-black in colour. The most unusual aspect of the pitcher was that the peristome widened to 6-7 mm at the neck and had its teeth facing forward, and then flared up and out in a "Y" shape under the lid. They were 5-6 mm high and wide. Many other *Nepenthes* have the peristome arranged up the neck in similar fashion but none have the "Y" shape. I spent about three hours searching this area but only located four plants as the slopes made it too dangerous to venture far. One plant eight meters away took me nearly an hour to reach—the slope was about 65 degrees with nothing to stop your fall for 400 meters. At this altitude (approximately 1800 m) flower spikes of *Nepenthes sibuyanensis* were visible in many areas of the grassy heath so it appears relatively common. Having finished with the photographs and collecting some seeds, we headed back.

Our last journey was to Palawan Island. Trent had located *Nepenthes* here

while exploring during a holiday weekend. Palawan Island is the last land mass between Borneo and the Philippines and is described as the last wilderness. It is famous for its mountains with vertical white limestone walls up to 2000 m tall. It has an underground river and many beautiful white beaches. It is also very, very hot. I found that even standing by the ocean did not provide relief from the heat. During a four-hour jeepney ride from Puerto Princesa to our beach destination we located an area with many large plants of what may have been *N. alata*. The pitchers were variable in shape and colour. The area had been cleared when the road was constructed and the plants had managed to take advantage of the clearing. There were many mature plants climbing through the trees. After many photographs and seed collecting we continued on.

We booked our chalets and meals for the night and left for our final *Nepenthes* site. After tripping and falling over rocks for a kilometer we came across a waterfall which created a miniature cool environment. Here the *Nepenthes* plants were surviving at sea level. We had to climb the nearly vertical slopes alongside the waterfall. It was exhausting with the heat and thick jungle. The plants grew amongst the trees at the top of the waterfall. The river flowing all around them kept them cool. Although similar to *N. alata*, these plants appeared very striking and the red colours were beautiful (Figure 5). The upper pitchers which were mostly green in colour, grew to be 20-22 cm long, and developed a broad peristome. We managed to find one mature plant with a couple of spikes so I collected some seeds.

The next day we headed back to Manila to prepare for the trip home, after three great weeks away. When I returned home I learned that most of the old original specimens of Philippine *Nepenthes* had been destroyed many years ago, and I should have collected some herbarium material. I suppose it will be an excuse to one day revisit the area.

Two of the *Nepenthes* from Sibuyan Island (*N. argentii* and *N. sibuyanensis*) are new to science. The identity of the plants we found at the second Palawan Island site is a mystery. The plants fit neither the description of *N. deaniana* nor that of *N. alata*. These plants may warrant the resurrection of *N. philippinensis*—the debate is continuing.

Sibuyan Island is a wonderful area that hopefully will be preserved in its natural form and is well worth further study—we hardly touched on the main areas. With the correct equipment and plenty of time, who knows what could be found there. Mt. Sibuyan and Guiting guiting have now been named by presidential decree as Guiting guiting National Park. Commercial logging has been halted in this park area. Logging is still going on around the perimeter and occasionally into the Park area by locals for housing materials. I hope that it is not too late to save this ecological paradise.

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