

Fall 2024 Expedition: Oct. 20 – Nov. 10 (Thailand, Vietnam)

On October 20, we departed for what was my 16th trip to Vietnam. Our team consisted of members from the Atlanta Botanical Garden (myself, Tim Marchlik), the United States Botanical Garden (George Guenther) and the Denver Botanical Garden (Phil Douglas). We had three main targets for our time in Vietnam...return to Phu Ta Leng mountain in the northwestern province of Lai Chau, scout and explore an area that has gone largely unexplored in the nearby province of Son La called Ta Xua mountain and, finally, spend time working with our colleagues at the Vietnam Academy of Science and Technology's Biodiversity Station just outside of Hanoi. However, like many of our trips to Asia, our first stop was in Bangkok to spend 2 days shopping at some of the largest plant markets in SE Asia where we were able to buy new species of Begonias and Hedychiums, interesting tropical Aroids, new species of Gesneriads to test for cold hardiness, Hoyas, tropical ferns, water lilies and other new plants mostly for our tropical collections.



Water Lilies at Bangkok Market

Hoya flower at Bangkok Market

Jewel Orchid at Bangkok Market

After spending a couple of days in Bangkok walking through the markets and trying to get over our jetlag, it was time to fly to Hanoi to begin our work in Vietnam. We landed in Hanoi about 2 pm and were picked up by our usual group of friends and colleagues from the VN Academy of Science. From the airport, we drove 6 hours to the mountain town of Sapa to stay the night. In Sapa, we made



arrangements for porters who would accompany us for the next few days of camping and got all of the gear together we would need for the mountain.

Sapa sits right at the base of the tallest mountain in Indochina, Fan Xi Pan Mountain (10,326'). Much of the time, the peak of the mountain is shrouded in clouds and Sapa becomes a cold, damp place. The weather had been terrible for the three weeks leading up to our arrival in Vietnam, but the tail end of the rainy season seemed to have moved on by the time we made it to Sapa and we awoke to blue sky and beautiful temperatures which stayed with us for the duration of the trip. Still feeling a little off from the jetlag, we decided to spend the day on Fan Xi Pan stretching our legs and trying to get acclimated to the elevation. Since it was late in the year, not much was flowering at the top, but the views made it worth the effort.



Sapa with Fan Xi Pan in the background



View from the top of Fan Xi Pan Mountain

The next day we loaded up the vehicles early and headed west towards the second highest mountain in Indochina, Phu Ta Leng (10,003'). We had been to this very spot in the spring of 2023, when so much was in flower, and were amazed at the diversity of the forest. Based on our previous observations, we decided that a return trip during the fall to collect seed was our best bet. The further away from civilization you get, the higher the degree of adventure on these expeditions. Since the start of the jungle was a few miles up a single track road out of town, we decided that it would make the most sense to hire motorbikes to get us through the agricultural areas quickly so we could make the most of our time in the field. Every available motorbike in town showed up to try and jockey for our business when they heard we needed a ride, and off we went.

Hanging on to the back of the bike with a firm grip, I began to notice the towering, evergreen trees getting closer and the scenery becoming more and more dramatic. After a thirty-minute white knuckled ride, we arrived at the river where we would begin to walk. The hiking was steep from the start. Tropical Aroids were climbing all through the trees at lower elevations and the air was hot and still. After an hour of hiking, we began to gain significant elevation and the flora had changed completely. The plants surrounding us had transitioned from a lush, tropical jungle to a canopy of huge deciduous and evergreen trees with a very rich understory of orchids, gesneriads and ferns. We also began to see small, bright red seed all over the ground which meant that one of our target genera was nearby, Magnolias. Rarely have I ever had the pleasure of experiencing both absolutely beautiful weather and a bountiful seed set, but this trip we timed it just perfectly. Before long, we had collected seed of at least 5 different species of Magnolia, Begonias, Rhododendrons, Maples, Illiciums and Hydrangeas to name a few. It was fantastic! Not only was the weather beautiful and the seed plentiful, but since it was dry, we didn't see a single leech on this trip which was a very pleasant change for the better.



Negotiating our rides to the jungle

Phu Te Leng Peak (10,003')



Trail up Phu Te Leng Mountain



Unknown Fern Species



Green Pit Viper



Perfectly Ripe Magnolia seed

Our campsite on Phu Te Leng Mountain

After spending three days exploring the hills and valleys of Phu Te Leng, it was time for the long hike out and to move onto our next destination. First, we would spend two nights in the town at the base of the mountain so we could get some clothes washed and begin the arduous task of cleaning and processing our collections. With the permits that we have, we are allowed to bring back both seed as well as living plant parts (root pieces, stem cuttings or entire plants), but they all must be cleaned, numbered and packaged for inspection for export. This is an all hands on deck sort of chore with some people squishing the pulp off of seed, some scrubbing dirt off of roots with a tooth brush and someone sitting at the computer assigning numbers and transferring all of our fieldnotes into a spreadsheet.



Once we were caught up with our collections and had some relatively clean clothes for our next adventure, we all piled in the van to drive 8 hours on windy, but beautifully scenic small roads through the mountains. We drove due south from the province of Lai Chau into the province of Son La. Our target area for exploring was the Ta Xua Nature Preserve, which has a peak elevation of 9,399'. We arrived at the town just as the sun was setting and met with the local forestry department to secure our permits and arrange a local guide to spend the next few days with us. The next morning, we were up before the sun, had a quick bowl of noodle soup for breakfast and made the hour drive up to the nature preserve. At the ranger's office, there were already a team of motorbikes waiting for us to take us up through the rice fields quickly and finally to the edge of the jungle.

Our luck with the weather was still holding out. It was cool in the mornings, warm in the afternoons with blue skies and sun the whole time. Weather is one of the biggest variables we have to deal with when on these trips. The difference in morale when it is cold and rainy trekking vs sunny and dry trekking is, as you can imagine, astonishing. Once again, the leeches were in hiding and we were loving every minute of it. As soon as we stepped into the shadow of the jungle canopy, we began to see interesting plants. Multiple species of *Arisaema* were both in flower and fruit, fall flowering *Begonias* were in full bloom and ruby red seed of various species of *Magnolias* littered the ground giving us some indication of what the towering trees overhead were. We fanned out and eagerly began taking photos and samples from all over the hillside. Slowly, but surely, we climbed out of the mountain valley where we began our trek and started to see even larger trees. The overstory was made up mostly of various species of Oaks, *Camellia* relatives and *Magnolias*, most of which were evergreen even at this elevation. The morphological differences in the various Oak acorns and *Magnolia* cones alone were enough to tell us that we were in an incredibly diverse and well-preserved jungle. The higher we climbed and the further away from civilization we got, the trees just kept getting bigger and bigger until we finally reached a

saddle in the mountain where our guide said the largest (and possibly the oldest, no one knows) tree on the mountain was growing. It was a HUGE, evergreen Camellia relative called Schima sp. That tree and many of the surrounding trees were some of the biggest I have ever seen in Vietnam and to come upon them on such a beautiful day made them even more impressive.



View of Ta Xua Nature Preserve from the Ranger Station



Lunch on the trail in Ta Xua Nature Preserve



Mag



Three different types of Acorns



Largest tree in Ta Xua with porter

Our fieldwork had come to an end and spend a few days working with Hanoi to process our collections and Vietnam Academy of Science and Technology's Biodiversity Station about an hour north of Hanoi. Our last visit to the Station was in January of 2024 where we began to help them set up a nursery area beginning with a place to sow seed and grow on young seedlings and I was eager to see the progress made over the summer. We spent three full days cleaning all of our plant and seed collections from our expedition, then helping them create a suitable seed germinating media, transplanting those seedlings that had germinated from our visit 10 months prior and finally shopping for materials needed by our colleagues to continue to grow the nursery such as peat, perlite, fertilizer, various size containers and seed sowing trays and a cement mixer for mixing the potting media quickly. These purchases were made possible because generous donations made to ABG's International Plant Exploration Program. We ended our time at the Biodiversity Station enjoying a large banquet highlighting the local cuisine with our entire team as well as the government leaders from the Academy of Science. Time to talk with the government officials about



the importance of our work and what our future projects are to include was the perfect conclusion to trip.



Cleaning Seed at Biodiversity Station



New cement mixer for mixing potting media

Transplanting seedlings from previous visit



Sign designating our collaborative projects



L to R: Phil Douglas, George Guenthner, Tim Marchlik, Scott McMahan