

Orchids of Thailand

(12th - 28th March 2016)



Report for RHS Bursaries and the Merlin Trust

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Front cover: *Conchidium lacei*

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Part I

Introduction

1 Personal Introduction

I have always been fascinated by orchids from a young age; growing up in Devon Burnham Nurseries was a local hotspot, I frequented here regularly to see (and buy!) tantalizing orchids in all shapes and sizes.

I have worked in three botanical gardens so far in my career: the Eden Project, Royal Botanic Gardens Kew and the National Botanic Garden of Wales. All of these places have had spectacular collections of orchids as well as other tropical plants. Because of this my knowledge of different orchid species, their growing requirements and propagation methods has progressed significantly over the past few years.

Even though the garden where I currently work has no orchid collection, when I read about the Orchids of Thailand tour I immediately knew it would be a trip of a life-time. . .

2 Orchids of Thailand

The aim of the Orchids of Thailand tour is to take tour members to a range of different orchid habitats and enable them to actually see orchids growing in their natural wild state, at a time when many of the plants are in flower. This makes it possible to compare the climatic conditions and observe the different orchid species growing in each habitat.

There are several treks into special orchid-rich areas that Peter has discovered over several years. These treks are exclusive to the tour as the areas visited are in remote places, which are not promoted. This is why the orchid flora is so great, as in the well known trails around national parks the orchids within reach have been removed by the locals to sell.

For this reason Peter is also accompanied by local guides, who live and work in the forests and have a wealth of knowledge; they know the areas visited like the back of their hands. As the guides are regulars on Peter's tour they know exactly what needs to be found and often know of new orchid-rich areas they have discovered since the previous years tour.

Whilst on the tour there is also the opportunity to visit orchid farms, local plant markets, botanical gardens and some of the many cultural attractions of northern Thailand. This enables tour members to not only witness the truly spectacular orchid flora but also to become completely immersed in the surrounding culture, gaining a rounded experience on a personal as well as a botanical level.

The tour is aimed to coincide with the end of the cold season and start of the hot season which is when a large number of orchids stimulated by the rise in temperature after winter dormancy start to flower - hence this is the best time of year to see a wide range of different orchid species in flower.

3 Peter Williams

The leader and guide for the tour was Peter Williams, who owns the nursery in Thailand and runs all aspects of Mae Tang Orchids. He has lived in Thailand since 1990, prior to this he was the manager of a large garden centre in England. Peter spends around four months a year in the UK, promoting the orchid tours and selling his orchids. The rest of the year he is in Thailand,



Figure 1: From left to right: Ulrich, Phil and Vicky at the plant market in Chiang Mai

supervising the growing of orchids at his nursery and undertaking exploratory trips to various wild habitats.

Peter has been growing and studying Thai orchid species for over twenty five years and, with his knowledge of the plants, he was able to identify most of the orchids seen on the tour even when they weren't in flower. He can speak Thai, which is essential to conducting a successful tour; he also knows the customs of the local people which helped us tour members to avoid common misunderstandings and cultural faux pas on many occasions!

He has been leading and guiding these tours for over twenty years and has organised and led thirty four group tours as well as many private tours (for couples and individuals); he has the experience and knowledge to ensure the whole tour ran as smoothly as possible.

Peter has his own orchid nursery in Thailand, which was established in October 1990 under the trading name of 'Mae Tang Orchids'. It is situated just outside the small market town of Mae Tang, 45 km north of Chiang Mai. It is a CITES approved nursery, with an extensive collection of Thai species that is maintained for propagation and sale purposes.

Peter takes orchid plants back to the UK twice a year and then offers them for sale by mail order and at selected orchid shows. During the first few years of trading Peter was frequently visited by orchid enthusiasts whilst they were on holiday in Thailand. Most of them were on 'package holidays' and the only orchids that they had been able to see were at the local orchid farms set up for tourists. Nearly everyone who visited Peter's nursery asked if he could show them orchids actually growing in their natural wild habitat.

With this in mind Peter decided to put a trial orchid tour together. This went so well that he decided to advertise and promote a yearly tour. The first official group tour was in the spring of 1995 and he has been conducting these specialist tours every year since. Over the years Peter has built up many useful contacts, which enables him to obtain very good rates for accommodation, transportation, guides etc. This, combined with local up-to-date knowledge, allows him to offer such a unique tour at a very reasonable price.



Figure 2: Wat Phra That Doi Suthep temple complex

Part II

Thailand

4 Geography

Thailand occupies the western half of the Indochinese peninsula and the northern two-thirds of the Malay Peninsula in southeast Asia. Its neighbours are Burma (Myanmar) on the north and west, Laos on the north and northeast, Cambodia on the east, and Malaysia on the south. Thailand is roughly the size of France.

5 Culture

5.1 Language

The Thai language is comprised of 44 consonants, 32 vowels and 5 tones in Thai pronunciation, along with a script that has Indian origins. The Thai language, belonging to the Thai family, is the main language in Thailand although there are several regional dialects as well.

Other languages spoken in Thailand are Chinese, Lao, Malay and Mon-Khmer, while English use is becoming more prevalent in government and commerce. English is also being taught as a second language in secondary school and universities, which enables the English speaking visitor in Thailand to have little trouble conversing.

5.1.1 Common Greeting

The “wai” is the common form of greeting which consists of raising both hands, palms joined with the fingers pointing upwards as if in prayer, and touching the body somewhere between

the chest and the forehead; this is the standard form, there are many different variations depending on who you are greeting. The wai is both a sign of respect as well as a greeting.

Respect and courtesy are demonstrated by the height at which the hands are held and how low the head comes down to meet the thumbs of both hands. The person who is junior in age or status is the first one to offer the wai; the senior person returns the wai, generally with their hands raised to somewhere around their chest. If there is a great social distance between two people, the wai will not be returned. It took me a while to grasp the rules of the wai!

5.1.2 Buddhism

Thailand is a stronghold of Buddhism, practiced by over 90% of the population. Buddhists believe that life does not begin with birth and end with death, but rather that every person has several lives based upon the lessons of life not yet learned and acts committed (karma) in previous lives. Buddhists believe that selfishness and craving result in suffering and that compassion and love bring happiness and well-being.

The true path to peace is to eliminate all desire, a condition which Buddhists define as 'nirvana', an indescribable state free of desire, suffering, or further rebirth, in which a person simply is, and is completely at one, with their surroundings.

5.1.3 Hierarchical Society

Thais respect hierarchical relationships, social relationships are defined as one person being superior to the other; for example parents are superior to their children, teachers to their students, and bosses to their subordinates. When Thais meet a stranger, they will immediately try to place you within a hierarchy so they know how you should be treated.

This is often done by asking what might be seen as very personal questions in other cultures, as status can be determined by clothing and general appearance, age, job, education, family name, and social connections. I became quite used to total strangers persistently asking my age!

5.2 Thai Demeanour

Thais place great emphasis and value on outward forms of courtesy such as politeness, respect, genial demeanour and self-control in order to maintain harmonious relations; many of their rules of etiquette are by-products of the Buddhist religion. It is a non-confrontational society, in which public dispute or criticism is to be avoided at all costs.

To be openly angry with someone might attract the wrath of the spirits, which in turn could cause violence and tragedy. Openly criticizing a person is a form of violence as it hurts the



Figure 3: Napamaytanidol Chedis



Figure 4: Hunting for orchids at Doi Inthanon - photo by Peter Williams

person and is viewed as a conscious attempt to offend the person being rebuked. Loss of face is a disgrace to a Thai so they try to avoid confrontations and look for compromises in difficult situations. If two parties disagree, one will need to have an outlet to retreat without losing face.

6 Climate

In relation to the rest of Thailand the north of the country is considered to be quite cool and has three basic seasons: The 'cold season' is from November to mid-February. There is very little rain but often there are heavy early-morning dews. The days are quite warm but the nights are cool. Around the summits of some of the higher mountains ground frosts are regularly recorded.

The 'hot season' is from early March to the end of May, when the days are hot and the nights warm. There is little if any rain and frequent naturally occurring forest fires.

The third season is the 'rainy season' which lasts from June to October. The days and the nights are warm and there are regular rainstorms which produce a constant humid atmosphere. The hottest months are usually April and May with December and January being the coldest.

7 Flora

7.1 Orchids

Over a thousand orchid species are reputed to grow in Thailand. The northern area of the country is especially rich in species because of its unique geographical position and its many different natural habitats. The mountains in the north of Thailand are the lower extremities of the Himalayan foothills and this is where many mountain species, otherwise found in the moist uplands of China and Laos, meet and overlap with lowland species common to southern Thailand and Malaysia.

Chiang Mai city itself is 700 km north of Bangkok and its main valley basin is 300 metres



Figure 5: Orchid nursery, full of vandas

above sea level. Forests and mountains cover around 70% of the province and away from the populated areas there are still large tracts of little-explored wilderness. New and different forms of orchid species are still being found. No one knows what exciting finds will be discovered in the Thai jungles over the next few years. . .

8 Forests

I am an unashamed tree lover, for me the forests the orchids were growing in were just as thrilling as the orchids themselves. We visited a range of different forest habitats throughout the tour, which enabled us tour members to compare the various climatic conditions and observe the different orchid species growing in each habitat.

Around 65% of Thailand's forests are deciduous, in these the seasonal changes are very distinct and most trees shed their leaves in the dry season. The remaining 35% are evergreen forests, where seasonal changes are minimal. There is considerable intermingling of the deciduous and evergreen forests and a number of categories of each type exist. The forest classifications described below are based on altitude; height of habitat is also directly related to the distribution of many orchid species.

8.1 Open Dry Dipterocarp Forest

This type of forest is common in the north and is found where the soil is mixed with sand and rocks and hence generally very porous. It is found from the plains to heights of about 1000 m and contains a ground layer composed mainly of grasses and deciduous annual plants. Its canopy is very open and usually dominated by a small number of dipterocarps. (Species of the family Dipterocarpaceae, which have two-winged fruit).

Annual rainfall is usually below 1250 mm. This forest type is a 'fire forest' and is characterised by the falling of leaves during the annual dry season. These fallen leaves serve as good

fuel thus forests fires are particularly frequent during the dry hot season and the species in it depend on fire to kill invasive non-fire-tolerant species and to ensure seed germination. If the pattern of yearly fires cease the forest would slowly change and eventually become a mixed deciduous forest.

8.2 Mixed Deciduous Forest

These forests experience pronounced wet and dry seasons and receive an annual rainfall of between 1250 to 2000 mm. They also occur from the plains to elevations of about 1000 m. Although Dipterocarpaceae members are still the dominant trees and most of the species lose their leaves in the dry season evergreen species are also present. The floors of these forests have vegetation such as shrubs, herbs and grasses; bamboo stands are often present where trees have been felled.

These forests are still open and not dense and are populated by large and mid-sized trees. During the dry season many trees will lose their leaves and forest fires still generally sweep these areas once a year. When the rainy season arrives the forest will burst into life with new leaves and flowers. The forest floor plants will also grow rapidly giving the forest a very lush appearance.

8.3 Evergreen Gallery Forest



Figure 6: *Bauhinia* sp.

This refers to all lowland evergreen formations usually found in the immediate vicinity of larger streams and rivers. These forests are easy to spot during the hot season because they remain green. This type of forest has strong seasonal rainfall and grows under more humid conditions than the deciduous forests. With increasing elevation a greater evergreen component appears until, where the generally cooler and moister conditions permit, the dry dipterocarp forests are replaced by broadleaved evergreen forests. There is often a rather abrupt transition between these forest types, usually at around 1000 m.

8.4 Broadleaved Evergreen Forest

In this type of forest the trees still shed their leaves and create new ones - but do so gradually over the course of the year. This forest is green all year round and, unlike the deciduous forest, does not look different during the annual seasons. These forests usually grow between 1000 to 2000 m where annual rainfall is above 2000 mm.

In this type of forest there are many temperate zone trees such as laurels, oaks and chestnuts; moss, ferns and rhododendrons are also common. The climate in these forests is relatively



Figure 7: Me with my unknown epiphyte at Doi Inthanon - photo by Peter Williams

cool because they are only found at high altitudes. This type of forest is also very important to the preservation of water sources.

Part III

Part 1: The North

9 Saturday 12th March

Weather: 25 °C

I arrived in Chiang Mai safely, if a little behind schedule - 45 minutes late. I was greeted by Peter's girlfriend, Ping, as Peter himself wasn't very well. I also met one of the other tour members, Phil, who also arrived on a late flight - we were the last ones to arrive. We got a taxi to the Duangtawan Hotel and met Peter briefly who explained about the activities which would be happening tomorrow - a visit to a temple and orchid farm. I face planted the bed as soon as I entered my room - jet lagged after a long journey!

10 Sunday 13th March

Weather: Sunny, 39 °C

Our first day got off to a casual start, as Peter explained he always makes the first few days more relaxed as everyone is usually tired from travelling. Once we are more accustomed to the weather and time difference the more serious treks into the jungle begin. For the first week as there are so many of us - 40 in total - Peter is splitting us into groups, so the people from the Singapore botanical orchid society are in one group and we, individuals from all over the world, are in the second group. We all do the same activities in the day, just separately.

10.1 Wat Phra That Doi Suthep

The morning was spent at the most popular temple in Chiang Mai, Wat Phra That Doi Suthep; it is Chiang Mai's most important and visible landmark. A local guide, Ning, showed us round and told us about the history of the temple then left us for an hour to explore on our own.

The monastery was established in 1383 by King Keu Naone to enshrine a piece of bone, said to be from the shoulder of the historical Buddha. The bone shard was brought to Lanna by a wandering monk from Sukhothai and it broke into two pieces at the base of the mountain, with one piece being enshrined at Wat Suan Dok. The second fragment was mounted onto a sacred white elephant who wandered the jungle until it died, in the process selecting the spot where the monastery was later founded.



Figure 8: *Diploplorea truncata*

carpus heterophylla were bigger than my head, it was an obligatory selfie moment! I also saw a cannonball tree, *Couroupita guianensis*, which was displaying its distinctive large round fruits.

Things really hotted up when we spotted *Dendrobium capillipes* flowering on another tree in the temple compound as well as *D. polyanthum* and *D. lindleyi* on other trees by the staircase leading up to the temple. They were high up in the trees but a German member was well prepared and had binoculars with him - it was sensational seeing my first wild orchids on the trip.

10.2 Insect and Orchid Farms

We returned to Chiang Mai where we got a quick bite to eat in a local restaurant then set off in the minibus again to an insect then an orchid farm, both on the outskirts of Chiang Mai. The insect farm had a huge array of dead butterflies, beetles, spiders, etcetera displayed in glass cabinets. The real joy was seeing live butterflies floating round a small enclosed garden

The 306 step staircase is flanked by mosaic serpents; the climb is intended to help devotees accrue Buddhist merit, but less energetic pilgrims can take a funicular-style lift! The terrace at the top of the steps displays a statue of the white elephant that carried the Buddha relic to its current resting place. The temple had an impressive ornate golden pagoda which contained holy Buddha relics, it was a very striking piece of architecture; it was literally gleaming in the bright sunlight.

It felt very strange being able to take photos in a sacred place of worship with people praying, Ning said it was absolutely fine and expected from tourists to do so. Even though I knew it was ok it still felt wrong using my camera! There are supposedly glorious views of the city of Chiang Mai from the temple compound but the view was hidden underneath a haze of forest fire smoke. It's a good excuse to return again!

I enjoyed looking round my first Thai temple yet I got just as excited by the *Ficus* trees which were covered in jackfruits as I did looking round the temple! The fruits of *Artocarpus*

and handling stick insects, iguanas, beetle larvae and a scorpion! The latter had had its sting removed so was safe to handle.

We spent an hour there then moved onto the orchid farm. It was a display nursery only, it doesn't sell stock to the public. It was a sea of colour, there were vandas in every colour imaginable covering two areas of the garden (as well as the odd *Cattleya*). I'm not a particularly huge fan of this genera, they're a tad too garish for my liking but I couldn't help but be impressed with the display. I found some smaller species mixed in with the real showy ones which was more to my taste!

As well as the orchids there was also several beautiful orchid trees, *Bauhinia*, in flower - this was the first time I had seen them in bloom; it was a memorable moment as I had always wanted to see this species flowering. Torch ginger (*Etlingera elatior*), heliconias, various palms and bamboos were all in the tropical planting too. I bought some excellent souvenirs from the orchid farms' shop, earrings and some scarves, which were all orchid related of course!

The drive to and from our days' destinations were almost as interesting as the destinations themselves; I loved witnessing massive red and pink *Bougainvillea* en masse along the roadsides, as prolific as brambles are back home in the UK. Frangipani (*Plumeria*) trees were also aplenty, it was the first time I had seen them growing outside in a tropical climate. We met with Peter on our return to the hotel in the evening, who explained we would be doing a short trek tomorrow near the famous mountain an hours drive away.



Figure 9: My unknown epiphyte

11 Monday 14th March

11.1 Doi Inthanon Roadside

Weather: Sunny, 38 °C

Altitude: 1,400 m

Forest type: Evergreen scrub

Today was amazing, the first time I hunted orchids in the wild! We set off early to get to Doi Inthanon, the highest mountain in Chiang Mai. It is close to the Himalayas, hence why the flora is so incredible in the surrounding area. It is protected from plunderers by forestry checkpoints and its natural inaccessibility. This has helped to preserve its orchid flora, which can be seen in abundance. We stopped off at a traditional hill tribe market halfway up the mountain, where I bought a huge bag of fresh strawberries for 40 baht, pretty much a pound in UK money. They were delicious!

We then drove up the mountain a little bit more and stopped on the roadside at the edge of the forest where, at first glance, it wasn't very thrilling; standard tropical vegetation growing on an embankment.



Figure 10: *Bulbophyllum rimannii*



Figure 11: The unknown terrestrial

Peter has been in this particular area before so knew there would be orchids for us to see; we had an hour to search amongst the undergrowth and trees. He didn't hand it to us on a plate, we set off in little groups searching ourselves and it wasn't long before there were cries of "over here!" "it's flowering!" "it has 12 flowers!!"

I discovered *Dendrobium infundibulum* growing close to the ground in semi-shade where we got some great close-up shots. Another specimen was also found high up on a tree in direct sunlight, both were at roughly the same stage of flowering.

Bulbophyllum rimannii was growing high up on a tree in direct sunlight, binoculars came in handy to identify this one! I later found the same species growing higher up, also on a tree but in more shade; I scrambled up a rock face to see it in detail and got a much better close up shot. It had small pinky-red flowers which were translucent when they caught the light.

Diploplora truncata was my favourite find of the day, tiny white flowers with pinky-purple colouring to the inner lip. The specimen we found had several flowers dangling down, all at their peak. It was growing at the bottom of



Figure 12: Orchids growing in the tree canopy at Doi Inthanon summit

a tree, half hidden behind a rock in the shade. Another specimen was growing a foot away in direct sunlight and had buds only, no flowers yet. I found this comparison particularly interesting as I would have thought the one in the sun would have flowered before the one in the shade.

We saw two species not in flower, *Oberonia* sp. and *Otochilus* sp. Even though we were getting majorly excited at seeing flowering orchids it's still an achievement to see them simply growing in the wild, just leaves or leaves and buds waiting to open! These plants were both halfway up trees, in semi-shade.

Someone found a terrestrial orchid with a spike of white flowers which Peter couldn't identify but did recognise which was very cool - it hadn't been seen on the spring tour before. It was in a little clearing in full shade, the flowers were out before the leaves.

The most exciting and memorable moment for me was when I discovered a teeny tiny epiphyte growing at waist height on a tree very close to the rock face in semi-shade; it had no leaves, very small pseudobulbs and about 6 flowers which were white with an orangey-red colouring to the inner lip. It was an absolute beauty, so delicate compared with the showy dendrobiums. Peter was very happy, he had never seen it in Thailand before; he nor anyone else could identify it so I may have found a new species!! Or, more likely, a species which is rarely seen in the north.

11.2 Doi Inthanon Summit

Altitude: 2,500 m

Forest type: Upper montane

Time flew by when we were orchid hunting, before we realised it was 1pm. We had a quick bite to eat further down the mountain at a small roadside cafe then drove all the way to the summit where it was positively freezing - 20 °C instead of 39! The forest from 2000 metres altitude is the only forest in Thailand that resembles a true upper montane formation.



Figure 13: *Coelogyne nitida*



Figure 14: *Otochilus fuscus*

The trees here being of smaller stature than in the lower zones, but absolutely covered with epiphytes such as mosses, ferns and orchids. The area around the summit frequently has ground frosts during the winter months but Peter said this doesn't seem to affect the orchids at all.

The view from the top would have been sensational if it hadn't been hazy with forest fire smoke. We were more excited by the short trail around the summit where we spotted literally hundreds of flowering *Coelogyne nitida*. Most were very high up in the trees, again binoculars came in handy. One was growing close to a stupa which meant we could get great photos and appreciate its wondrous smell. It's so fragrant, better than a rose in my opinion. Sometimes orchids look dazzling but smell of nothing which is what can disappoint me about them yet this was not the case for *C. nitida*; it pleased all the senses.

We also found colonies of *Otochilus fuscus* growing alongside *C. nitida*, which is a common pairing apparently. *O. fuscus* is also white but smaller with thinner sepals. These two species aren't seen anywhere else other than on this mountain in Thailand, they don't grow



Figure 15: Rhododendrons covered in moss

below 2,500 altitude.

The majority of the specimens we saw were growing very high up in the trees so get a lot of air movement and direct sunlight - something I didn't really associate with orchids before seeing them in their natural habitat. The trees they were growing on were mainly *Schima walliachi* and *Viburnum cylidricum*.

The trail passed through a marshy bog area that had a mystical, prehistoric appearance, like a scene from Jurassic Park. The trees were covered with thick moss, it is a well-known area for special bird fauna. I saw a caterpillar but no birds! There were plenty of white and red rhododendrons in flower as well as the two orchid species we had seen previously.

11.3 Napamaytanidol Chedis

We then began our descent in the minibus, where we travelled further down the road to the Napamaytanidol Chedis - these magnificent structures were built to honour the King and Queen of Thailand.

We had an hour to walk around and take in the scenery; Peter said the gardens within the Chedi compounds are famous because they are planted with ornamental plants from what the Thai people call "the cold countries". Many of these are popular summer bedding plants back home in the UK like antirrhinums, petunias, begonias, etcetera but quite exotic to the locals. I found it quite ironic that we had travelled miles and miles to see plants which are exotic to us, orchids, and came face to face with all too familiar plants!

12 Tuesday 15th March

Weather: Sunny, 45 °C

Today was very gentle, a chance to relax after the adventures from yesterday. Peter said the usual routine is an intense day of orchid hunting followed by a day of more casual excursions.



Figure 16: First trek in the wildlife sanctuary

12.1 Plant market

We set off in the morning to the local plant market on the outskirts of Chiang Mai; it has undergone quite a lot of expansion over the past few years and there are now over 200 different plant stalls. The market sells all kinds of ornamental garden plants including bromeliads, cacti, ferns, fruit trees, herbs, palms, water lilies and plants from the “cold countries” of course!

I couldn't get over all the streets lined with plant stalls, the sheer scale of it was overwhelming. It is also the main market for wild-collected orchid species, the orchid shops were very impressive with a wide range of hybrids and species on display. These are usually collected by the hill tribe people and then sold by the kilogram to the stall owners. The plants are then sorted, cleaned and bunched ready for sale to other locals or to nurseries in Bangkok. By observing the species present, and the prices charged, we all got an idea of what is still plentiful in the wild and what is considered rare.

One stall had signs clearly stating “NO PHOTOS” because often reputable orchid growers will take pictures of stalls with plundered orchids and put them on social media, asking people not to buy from these people - a good name and shame! Although we couldn't buy any plants because of CITES regulations I did pick up some lovely ceramic pottery instead; one of a lotus leaf, the other an elephant statue.

We returned to Chiang Mai, had a quick bite for lunch then checked out of the Duangtawan Hotel and made our journey to Chiang Dao, about two hours north from Chiang Mai near the Burmese border.

12.2 Mae Mali

I saw a lot of mango groves growing in the fields on route as well as huge lotus fields. We stopped off at Tesco's in the village of Mae Mali to pick up lunch for tomorrow's trek into the jungle - it was very similar to Tesco's in the UK. We also visited the local market, which was a typical rural Thai market; it is mainly used by the people in all the nearby villages.



Figure 17: *Dendrobium fimbriatum* en masse

It was like a farmers' market back home in Devon except we don't normally have live fish in buckets and intestines of animals lying on plates for sale! I bought a dragon fruit, had coconut juice from a stall holder who drilled a hole in a coconut fruit for me, got some authentic joss sticks which Thais burn in the temples as well as a gift for my colleagues at work - a big bag of dried locusts to eat!

12.3 Marisa resort

We arrived at our new home for next four nights at about 4.30pm. The Marisa resort is absolutely gorgeous, a world away from the previous hotel in the city. The rooms are individual lodges dotted around the 2 acres of grounds which is situated near a protected wildlife sanctuary. The grounds were full of tropical plants, including orchids, so I was happy!

There's an open air restaurant on site, we all met there for dinner and a talk from Peter. He told us about tomorrow's activities which will be all day treks into the surrounding jungle. There will be two groups trekking in the same area, one is a normal paced tour and the other a slower paced tour for the less physically abled members. He also gave a possible name for the orchid I spotted yesterday, *Conchidium lacei*, previously in the genus *Eria*. An orchid friend of his did some research and gave it as a possible name - how exciting!

13 Wednesday 16th March

13.1 Wildlife Sanctuary

Weather: Sunny, 40 °C

Altitude: 1,000 to 1,080 m

Forest type: Mixed deciduous

To reach our first proper jungle trek we had to enter a Wildlife Sanctuary.



Figure 18: *Cheirostylis thailandica*



Figure 19: Close-up of *Dendrobium fimbriatum*

many different orchid species.

There was a forest ranger checkpoint at the entrance to the sanctuary, only people who live in the area are usually allowed through - this is to help protect the wildlife and to discourage people from taking anything from the forest. Peter obtained prior permission from the sanctuary's headquarters to allow us to explore the area.

We drove for a while up a steep and winding road through thick forest, passing some very impressive scenic mountains. Although no trails are shown on the maps of this area there are many secret trails that are only used by the local villagers, which is what we followed today. We had a local guide, Gung, as well as Peter leading us through the forest.

The minibuses parked on the roadside then we made our way along a fairly decent track then went off this onto a smaller path which took us on a narrower, steeper ascent. The habitat wasn't anything like what I was expecting; I imagined a dark tropical jungle full of damp vegetation, not an open, bright forest! Its proper name is a 'mixed species deciduous', this type of seasonal forest is widespread in northern Thailand and is the habitat of



Figure 20: Me in the wildlife sanctuary - photo by Phil Gould

We were in direct sunlight for most of the trek, Peter made sure we all had four bottles of water with us prior to starting the trek to avoid dehydration. Even though I was in the normal paced group we still adopted a steady pace, adjusting to the heat. The leaves beneath our feet were surprisingly slippery as they were so tinder dry. We saw one of the hill tribes making fire breaks by sweeping the leaves on the ground to one side - when the forest fires get going they can rage through in seconds. The orchids always survive because the flames only reach about 6 foot high up the trees.

It was a fantastic day for orchid spotting, we saw 15 different species. Most were very high up in the trees, binoculars came in handy as did a good zoom lense on cameras. We mainly saw dendrobiums, including: *Dendrobium capillipes*, *D. dixanthum*, *D. fimbriatum*, *D. findlayanum*, *D. gratiosissimum*, *D. lindleyi*, *D. parcum*, *D. polyanthum* and *D. pulchellum*.

The species with yellow blooms contrasted beautifully against the stark blue sky, which was the majority of the dendrobiums. *D. findlayanum* was easy to identify as it has distinct shaped canes with little nodules at intervals along each cane, and its flowers weren't yellow!

We saw our first vanda, which was *Vanda coeruleascens*, growing on a tree at head height in direct sunlight. Its lilac-purple flowers were tiny compared to the large garish vanda cultivars. After being in the open forest for a few hours we came to a shadier spot with a dense evergreen canopy and rocks; Peter pointed out a particularly good specimen of *Dendrobium fimbriatum* which was growing low down on a rock - perfect for close-up photos.

Gung then showed us a *Cymbidium aloifolium* high up on the rocks in semi-shade. It had an abundance of flowers, the fragrance was subtle like honey. The first orchid I grew which flowered was a *Cymbidium*, seeing one in the wild for the first time was an overwhelming feeling.

Cheirostylis thailandica and *Cheirostylis yunnanensis* were growing on the rocks too, in little cracks and crevices in semi-shade. They are little lithophytes no taller than 6 inches with white flowers, almost identical in appearance except *C. thailandica* has two green spots in its throat. The cutest orchids of the day!

We saw a *Paphiopedilum* which Peter identified by its huge root - nothing else was visible! It was high up on the rock face, the next aim is to see one with leaves, or even flowers. . .

We stopped for lunch briefly and saw an absolute beauty of a bulbo; *Bulbophyllum muscarirubrum* was on a rock near a sheer cliff face in semi-shade. It was hard trying to focus on the tiny specimen as well as concentrating on not losing your footing! It had wine red flowers packed together like a Borrower size bunch of grapes, with no leaves and shrivelled pseudobulbs. The complete inflorescence was only about 1 cm in length!



Figure 21: *Bulbophyllum muscarirubrum*

were covering the branches they were growing on, high up in the trees. *D. parcum* has tiny, insignificant yellow flowers, we could just make out it was actually in bloom with the aid of binoculars!

We also saw a tiny *Phalaenopsis* at head height in the nook of a tree in direct sunlight; it wasn't flowering but was still a great find. We also saw *Eria pannea* growing in similar conditions to the *Phalaenopsis*, also not in flower. We returned to the resort after our 5 and a half hour trek, sweaty but happy - it's whetted my appetite for the treks to follow. . .

14 Thursday 17th March

Weather: Sunny, 39 °C

Today's activities were relaxed so some of the tour members could recover from our first all day trek yesterday.

14.1 Village temple

The first stop was at a nearby village temple, situated alongside the Ping River. It wasn't as showy as the one in Chiang Mai but somehow looked more authentic for its rustic appearance.

We saw another *Cymbidium aloifolium* on a rock but it was HUGE - Peter said he's seen it growing there for the past 11 years. It's in a perfect spot just off one of the smaller pathways, ideal for photographing.

The trees near the rocky area we explored were covered in coelogynes, you could barely see the bark because there were so many orchids on them. I'd love to see them flowering but as they bloom in November there's not much chance - I can dream! All of the rocks which the various orchids were growing on are black limestone, found in Thailand.

After lunch we returned to the minibuses, via the same route, where we spotted a few other hidden gems. It always pays to keep the eyes open as much on the way back as the way there, even though we returned via the same route when you approach it from a different angle you see things which weren't visible before.

We spied cracking specimens of *Dendrobium capillipes*, which we had seen before, and *D. parcum*, which was our first sighting. Both



Figure 22: Me with an unnamed green *Coelogyne* - photo by Phil Gould

At the riverbank within the temple compound were large shoals of fish, which we could feed for 10 baht. The fish congregate here because they are regularly fed by the monks and visitors to the temple. The fish benefit from having a constant source of food and the temple benefits because the proceeds from the sale of the fish food go towards the upkeep of the temple buildings.

14.2 Orchid farm

We then visited an orchid farm where we spent the rest of the morning. It was a nursery propagating plants to sell, different to the display nursery we saw in Chiang Mai. The owner cultivates local species and, when they are in flower, sends them to his daughter who has a shop at a famous plant market in Bangkok. Unfortunately, as most of his daughters customers are living in Bangkok, they will find that the plants will probably never flower as good again because they won't receive the normal cool dormancy period that they do in the north of the country.

I loved looking round the nursery, my career started in a nursery environment, it's where I feel most at home - hence visiting nurseries evokes even more child-like enthusiasm from me than usual! The orchids were growing on bark or black slitted pots, hanging from wire on long rails. The growing areas were very basic, there were no glasshouses or enclosed structures; just rows



Figure 23: Unnamed *Cymbidium* cultivar



Figure 24: Tour members at the orchid farm

and rows of rails and a few simple waist height tables made out of palettes. These areas were like marquees in construction, with no sides and a roof of shade netting as protection from the sun. I saw species of *Bulbophyllum*, *Dendrobium*, *Phalaenopsis*, *Coelogyne*, *Vanda* and *Paphiopedilum* all in flower. Alas the paph was a cultivated one, it was still very cool though. There was also an unnamed *Cymbidium* cultivar which was the exact shade of chocolate with a smell to match - divine!

Our host was very generous and provided us with refreshments of fresh fruit and mango juice pressed from groves just down the road. The warm hospitality of Thai people has been unwavering since I arrived, it makes the experience of visiting a country like this so far from home just wonderful.

14.3 Chiang Dao cave

We spent the afternoon at a cave in Chiang Dao, which is one of the largest and most beautiful caves in Thailand. A main path was illuminated with electric lights, some of us decided to venture into the deeper recesses which we explored with a local guide carrying an oil lantern. It was awesome, there were loads of shrines and stupas everywhere. The rock formations were especially breath-taking, it put the small number of caves I've visited at home in the UK to shame! In the rainy season most parts of the cave cannot be accessed because the water fills them up, about 12 feet high in some places. Outside by the cave was a short pathway up the edge of the mountain where there was a cracker of a *Bougainvillea* trailing across the cliff face.

Even though it wasn't a day for orchid hunting in the wild I feel my identification skills of non-flowering orchids is improving; I had major breakthroughs at the orchid farm where I managed to correctly identify *Vanda*, *Coelogyne* and *Dendrobium* from their foliage and pseudobulbs alone. When surrounded by passionate people it is part of the process to absorb as much of their knowledge as possible, retaining it and then using it.

We had a few hours free in the afternoon once we were back at the resort. I showed one of the tour members, Phil, a *Vanilla planifolia* which was in the grounds - it had buds which weren't

open alas! I also showed Phil the jade vine, *Strongylodon macrobotrys*, which was growing by one of the lodges. I adore its distinctive eerie sea-green bunch of flowers, their turquoise hue was almost fluorescent in the strong sunlight.

I first saw a jade vine at the Eden Project, it was a pretty pathetic specimen with one flower; even though this specimen wasn't strictly in the wild it was still a highlight to see one growing outside in a tropical country with a real abundance of blooms. After dinner I got an early night, in preparation for tomorrow's second all day trek in the jungle.

15 Friday 18th March

15.1 Wildlife Sanctuary

Weather: Sunny, 39 °C

Altitude: 950 to 980 m

Forest type: Mixed evergreen

We trekked in the same Wildlife Sanctuary as Wednesday but in a slightly different area. It was more a mixed evergreen forest instead of deciduous, meaning there was more shade. Peter said the main difference about this trek is the altitude was lower and more of the orchids were growing lower down on trees or rocks, meaning we could get more close up and personal with them. There has been less forest fires in this area, hence why the orchids have started growing lower down in the canopy.

Over half of the tour members decided not to participate in this trek as they found our first trek too strenuous for them. Two groups with a total of 39 people was reduced to one group of 16! In my opinion it was better having a smaller group of people on the trek, as it was easier to keep track of people and not miss any orchids which were spotted.

Gung and Peter were guiding us again, we spotted *Dendrobium lindleyi* en masse which is turning out to be a very common orchid, the one we've spotted the most of so far; it's becoming quite ordinary to see this species growing in the wild, something I never thought I'd say! During the tour I'm aiming to improve my identification of dendrobiums not just by the flowers but by the canes as well; when some species are high up in the trees the easiest distinguishing feature is their canes, and when they aren't in flower, this is the only physical feature to aid identification.

I had been getting *D. lindleyi* and *D. capillipes* confused, however after absorbing both Phil and Peter's knowledge I can now tell the difference between the two; both have yellow flowers, *D. capillipes* has very short stout leafless canes with a short upright inflorescence which has between 3-5 flowers. *D. lindleyi* simply droops down from its canes, like it's cascading from a hanging basket.

Two other dendrobium species which are similar are *D. dixanthum* and *D. fimbriatum*, both also yellow flowering;

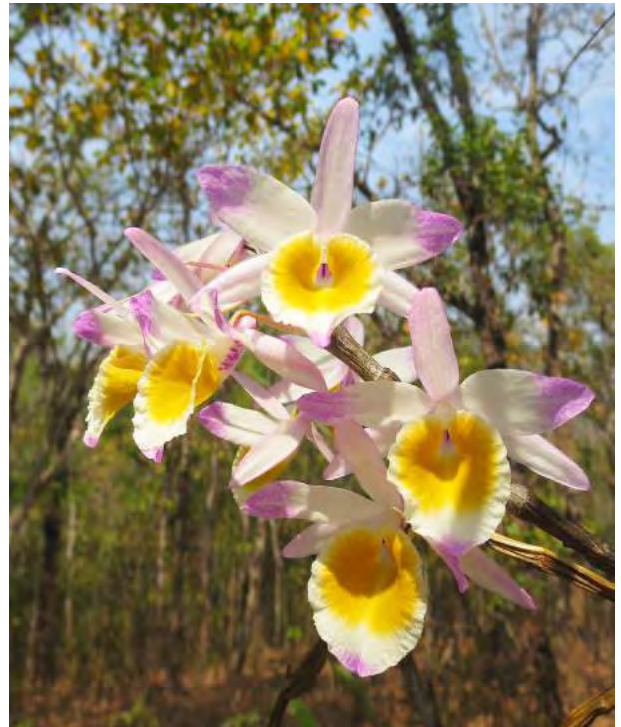


Figure 25: *Dendrobium gratiosissimum*



Figure 26: *Dendrobium polyanthum*



Figure 27: *Dendrobium pulchellum*

D. dixanthum has tall thin upright canes with the old canes yellow or red and flowers on one year old canes which are covered with a silvery-papery sheath. *D. fimbriatum* is a semi-deciduous species with long canes and mostly flowers from the deciduous canes.

A great find early on in the trek was *Hydrochilus parishii*, we spotted a few specimens high up in different trees in semi-shade, then I spotted a cracker slightly lower down in direct sunlight on another tree with at least 3 flower spikes in full bloom.

Dendrobium gratiosissimum was also flowering en masse, specimens varied from growing at waist height on trees in semi-shade to high up on trees in direct sunlight. This species was also variable in colour from very pale flowers only to ones having purple-coloured tips.

Throughout the day there were loads of trees covered in coelogynes, the same as our first trek. Phil told me a good way to identify them is to remember they flower between

two leaves, a characteristic of coelogynes in particular.

A new find for today was *Acriopsis indica*, with tiny pale yellow flowers on a branched inflorescence. It was growing head height on a tree in semi-shade, it didn't look like the pseu-



Figure 28: Me with *Paphiopedilum bellatulum* - photo by Ulrich

dobulbs belonged to it because they were very dry and shrivelled, like prunes!

Another insignificant species was *Thelasis perpusilla* (previously in the genus *Eria*) with tiny white flowers on long thin stalks. We only saw it at shoulder height on trees in full shade. Species we saw again were *Cymbidium aloifolium*, *Dendrobium polyanthum*, *D. pulchellum* and *D. fimbriatum*.

We, very frustratingly, found a specimen of *Dendrobium cariniferum* that was so nearly in flower but not quite, so it couldn't count as a flowering specimen - one more day and the petals would have been open! It was in a much shadier part of the forest, on a tree at shoulder height.

Peter showed us a dendrobium which was seen on last years spring tour which had green flowers and couldn't be given a species name - it was in bud today, not in flower alas. Orchid experts think it could be a natural colour variation of *D. nobile* but no one knows for sure. It was exciting to see it even though it wasn't flowering.

As well as orchids we also spotted more wildlife today than previous treks. I noticed a *D. pulchellum* growing close to the ground and went to take a closer look then jumped out of my skin when I saw a little tropical bird nesting right next to it! Gung also found a spider which wasn't poisonous and was very impressive; it had long thin black legs with a yellow and black body.

My favourite none-orchid plant find today was a *Hoya* sp.; I was having some water at the edge of the path we were following at the time and noticed several small round white ball shaped objects in the trees - I adjusted my eyes to the sunlight and, on closer inspection, realised it was a brilliant hoyo with about 6/7 flowers. The scent was heavenly!

When we stopped for lunch we spotted another two new species for today; a large *Dendrobium signatum* high up in a tree in semi-shade, bursting with white flowers. I couldn't get a decent photograph of it, seeing it at that size was more than good enough however. Peter said he's never seen *D. signatum* growing low down in the canopy before, plants are always high up in the trees.

Peter spied a little white terrestrial similar to the one we spotted on Monday. This was

Goodyera thailandica with tiny white flowers (out before the leaves) on a small stem, in a little patch of sunlight just off the main path. After lunch we slowly meandered back to the minibuses, not spotting any new species on the way.

We drove about 10 minutes then stopped for a mini trek to see a *Paphiopedilum bellatulum*; Peter warned us it wouldn't be in flower at this time of year, however it's an achievement in itself to see a slipper orchid in the wild - usually they can only be found in very remote areas. Only 5 of us in the group chose to see it, as it was way up in the cliffs on a near vertical surface, a really good workout to get to the top. I'm used to rock climbing so quite enjoyed the scramble, however I think a few of the others found it pretty challenging!

The effort was worth it though, we saw one specimen high up in the cliff then another two growing side by side in a little crevice about waist height in semi-shade. It was a joyous moment seeing those distinctive leaves in situ, I couldn't get over how well it was growing in such an inaccessible place.

Today was our last day of orchid hunting in the wild for part one of the tour; in this first half we've seen 28 different species of flowering orchids in total which is even with last years' record. Peter is optimistic that we might beat last years total number in the next 10 days. Fingers crossed!

16 Saturday 19th March

Weather: Sunny, 40 °C

Today we left the Marisa resort and began our journey back to Chiang Mai, stopping on route to visit the Queen Sirikit Botanic Gardens.

16.1 Queen Sirikit Botanic Gardens



Figure 29: *Hoya* sp.

These gardens were set up with help and advice from the Royal Botanic Gardens Kew and were the first official botanical gardens in Thailand. It is home to a great number of valuable Thai plants, with a focus on rare, endemic, and endangered species. The comprehensive plant collections are set out alongside themed landscaped trails which blend into the natural surrounding topography beautifully.

We only had an hour and a half to explore so I headed straight for the complex of glasshouses which were right by the entrance. There were at least 6 or 7 glasshouses filled with bromeliads, cacti, succulents, ferns, orchids, aquatic plants and tropical species. All of the display houses had rockeries and water features which enhanced the planting and gave it more of a natural feel.

My favourite was the tropical house, it had a large waterfall and a walkway to the middle of the house, meaning you could look



Figure 30: Cacti and succulent house at Queen Sirikit Botanic Gardens

down on the planting and get a different perspective. The cacti and succulent house was also very impressive, there were a lot of different species; some specimens were huge, towering cacti underplanted with small, sprawling succulents.

16.2 Orchidarium

Afterwards we drove a short distance to look round the gardens Orchidarium; it has a comprehensive collection of orchids with 400 species indigenous to Thailand which are carefully set out and all named. I was gobsmacked at how many glasshouses there were, at first I thought it was only two large houses but the further back I wandered the more glasshouses appeared, each one linked to the next. It was like the TARDIS from Doctor Who, bigger on the inside than it looks from the outside!

I saw fantastic flowering specimens of *Vanda*, *Cymbidium*, *Dendrobium*, *Bulbophyllum*, *Phalaenopsis* and *Paphiopedilum*. The paphs were extraordinary, being able to get right up close and examine the flowers was wonderful.

We spent just over an hour there then drove back to Chiang Mai where we checked into the Duangtawan Hotel. We will be spending the next 3 nights here, once we're joined by members who are on the second part of the tour only we'll move onto the East of the country.

17 Sunday 20th March

Weather: Sunny, 40 °C

We spent today having a tour of Chiang Mai, looking round markets, shops and temples with the local guide we had for our first day, Ning. It was a very educational day of Thailand's culture, my favourite day of cultural excursions so far.

17.1 Silk factory

We visited a silk factory in the morning, where we could see the process of silk being made; from the moth to the larvae then from the cocoons being dried and boiled to the thread being taken out of them. 5 metres of thread is taken from one cocoon! It was fascinating seeing the women workers using hand machines to weave the thread into various garments. We looked round the shop afterwards, most of the products were very very expensive as was to be expected!

17.2 Wood carving factory

We then went to a wood carving factory just up the road, we saw men carving wooden items all by hand. They had various chisels which all got different effects out of the wood - it was a privilege being able to see them work. The carvings which were for sale in the adjoining shop ranged from statues of buddhas, elephants and other religious animals to king sized bed frames, wardrobes and tables.

17.3 Wat Srisuphan



Figure 31: Wat Srisuphan

In the afternoon we visited two temples, one in the new area of Chiang Mai and the other in the old part of the city. Wat Srisuphan is unmissable as it is covered inside and out with silver, nickel and aluminium panels, embossed with elaborate repoussé-work designs. It looked just like a giant jewellery box, a complete contrast with the first temple we saw, Wat Phra That Doi Suthep, which had its main pagoda covered in gold.

Wat Srisuphan was founded in 1502, but little remains of the original temple except for some teak pillars and roof beams inside the main hall; apparently the murals inside show an interesting mix of Taoist, Zen and Theravada Buddhist elements. Ning pointed out the gold and silver Ganesha statue beneath a silver umbrella by the temple, a sign of the crossover between Hinduism and Buddhism in Thailand. Because Wat Srisuphan is an active ordination hall, only men are allowed to enter the temple.

According to local notions women are considered to represent a threat to the disciplinary purity of the buddhist community by being able to strip monks of their power; it is believed women possess a powerful "impurity" which is displayed when they have their periods, as the blood released from their bodies is said to be dirty and "unholy".

It was very interesting hearing about the divide between men and women in Buddhism; Ning said in local communities where clothes are hung out to dry you will only ever see women's skirts and knickers below men's clothing, so the women's power represented in their clothing cannot tarnish the men's power. Wat Srisuphan also hosts a silver-working school



Figure 32: Wat Chedi Luang

where trainee monks learn the art of working silver, to help ensure that the tradition of the village is passed on. We saw some of the young monks at work, again it was a privilege being able to engage with the local people and see the work they do for a living.

17.4 Wat Chedi Luang

The second temple of the day was my favourite of the whole tour by far; Wat Chedi Luang. It's a show-stopping ruined temple in the old part of Chiang Mai, dating from the 14th and 15th centuries. King Saen Muang Ma (ruled from 1385-1401) began construction on Wat Chedi Luang in 1391 to hold the ashes of his father, Ku Na. The building was expanded by later kings, reaching its final form in 1475.

It was then given the great honor of housing the Emerald Buddha, the holiest religious object in Thailand (now kept in the temple of Wat Phra Kaew in Bangkok). At this time, Wat Chedi Luang rose to a height of 84 metres. In 1545 a severe earthquake toppled part of the great spire, the destruction of which can be seen today. The Emerald Buddha was kept in the chedi for another six years, then moved to Luang Prabang (now known as Laos) by the king.

Five years later, Chiang Mai fell to the Burmese. The temple was never rebuilt, but even at its post-earthquake height of 60 metres it remained the tallest structure in Chiang Mai until modern times. Despite its ruined state, the temple complex of Wat Chedi Luang still has several Buddha shrines and remains an active place of worship regularly frequented by monks. We saw several wandering around, unmistakable in their saffron-coloured robes.

The large assembly hall (viharn) next to the ruined temple was built in 1928. The interior was absolutely jaw-dropping, tall golden columns supported a high red ceiling which contained a massive standing Buddha known as the Phra Chao Attarot. It is made from brass alloy and mortar, dating from the 14th century.

Wat Chedi Luang is easily the most impressive temple complex I've seen since arriving in Thailand. I'm not a religious person but at that moment it felt like the most spiritual and sacred place on earth. Ning told us about a local legend referring to *Dipterocarpus alatus* trees; next to



Figure 33: Cut flower stall at the local market

the entrance to the temple complex is a huge dipterocarp tree, one of three revered as protectors of Chiang Mai. According to legend, if one of these trees falls, a great catastrophe will follow.

17.5 Local market

For the last hour of the afternoon we visited a local market, also in the old part of the city. It was similar to the market we saw in Mae Mali but on a bigger scale; the streets were lined with typical food stalls, including live fish, animal intestines, crickets, locusts and other grubs as well as live turtles, frogs and snails. There was plenty to choose from if you were feeling peckish!

There was also a shopping centre with three levels of market stalls; the ground floor was devoted to food with the upper floors housing a host of clothing, bags, shoes, jewellery and any other knick knock you could think of. There was so much to see, it was hard to take everything in! A whole street was lined with cut flowers, it's the most popular cut flower market in Chiang Mai. Roses, lilies, heliconias and of course orchids, were the most prominent; varieties of dendrobiums were selling like hot cakes!

When we returned to the hotel we had a quick meeting with Peter, who informed us the schedule for tomorrow and Tuesday. He also had a surprise organised for us after the meeting, a 30 minute tour of Chiang Mai by rickshaw! It was an awesome way of seeing the main parts of the city, we rode round part of the River Ping which runs through Chiang Mai.

We seemed to have main priority on the road, motorised vehicles would stop and let our procession of rickshaws cross over! Apparently rickshaws are dying out, tuk-tuks are overtaking them in terms of popularity. The Thai people who rode us round must have been in their 70s, Peter said when they go it will be the end of that era. I'm glad I had the chance to experience this iconic mode of transport.



Figure 34: Me in the Orchidarium at Queen Sirikit Botanic Gardens - photo by Phil Gould

18 Monday 21st March

Weather: Sunny, 39 °C

Today was the changeover day for people leaving the first part of the tour and joining for the second half, hence it was a free day for those of us staying for both parts.

18.1 Queen Sirikit Botanic Gardens

I arranged with Phil to visit the Queen Sirikit Botanic Gardens again, as we both felt there hadn't been enough time to look round properly at the weekend. Peter got a quote from a car rental company opposite the hotel, it only came to 1,200 baht for a car with a driver, including fuel, to take us to the gardens at 9am and back at 3pm. We split the price between us, meaning it came to roughly £13.

We had a brilliant time wandering round the garden, we went on the canopy walkway first which gave a bird's eye view of the surrounding mountains and forests. It also meant we could get up close to the trees and the orchids which were growing on the trees! *Dendrobium secundum* and *D. pulchellum* had their blooms at the peak of flowering.

We went on a short trail round the arboretum, seeing awesome specimens of several members of Dipterocarpaceae and Moraceae. This trail led us down to the waterfall area

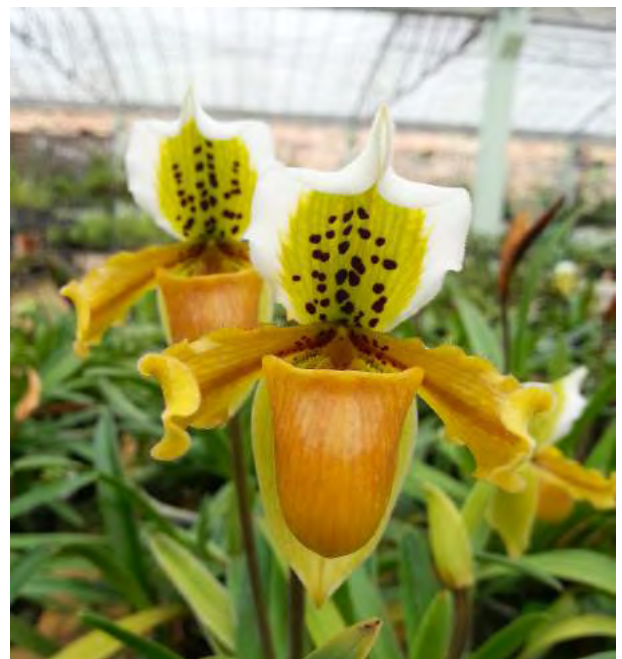


Figure 35: *Paphiopedilum* sp.



Figure 36: Me at Phua Hin Rong Kla National Park - photo by Phil Gould

which was refreshingly shady and breezy compared to the rest of the garden. We climbed a steep hill and came to the Orchidarium, where we spent a few hours refreshing our memory from a few days ago.

As it was a weekday there were a few workers who welcomed us and showed us some particularly outstanding species, a *Paphiopedilum niveum* var. *ang thong* stood out which I hadn't noticed the other day. It had unusual pale yellow flowers which contrasted well against its dark green leaves. The nursery is kept in immaculate condition, especially considering the scale of it. The floor didn't have a leaf on it, all of the orchids themselves were healthy with no sign of pests or diseases. It would be a dream place to work!

We had slight problems returning to where our driver was; we had walked to the bottom of the garden which is situated on a very steep hill. There should have been shuttle buses running to take visitors from the bottom to the top or vice versa except they weren't running today! We walked about a quarter of the way then blagged lifts from two very kind visitors, which eventually took us all the way to the top. An eventful end to an otherwise flawless day!

Part IV

Part 2: The East

19 Tuesday 22nd March

Weather: Sunny, 40 °C

It took all day to reach our first destination for the second part of the tour, Phitsanulok which is 341 kilometres from Chiang Mai. We are staying at the Rainforest resort which is just what it says on the tin - a resort in the rainforest! After arriving and dumping my bags I headed straight for the Kaeng Song waterfall, a 5 minute walk up the road from the resort.

It is one of many waterfalls in the Wang Thong District of Phitsanulok, 150 metres wide and



Figure 37: *Vanda pumila*

10 metres high, coming from the Lam Nam Khek stream. During winter and summer when the stream flows slowly people can swim in it safely, however in the rainy season no one is allowed in the water as the stream flows too strongly. It wasn't a classic spectacular waterfall due to the small amount of water at this time of year(!) but still a pleasant enough sight on a sunny evening.

When Peter briefed us about tomorrow's events he also let us know the name of the white terrestrial orchid we saw on the first day of the tour; *Zeuxine affinis*.

20 Wednesday 23rd March

20.1 Phua Hin Rong Kla

Weather: Sunny, 38 °C

Altitude: 1,150 m

Habitat: Very open rocky habitat with sparse low growing shrubs

Today we trekked in a remote highland National Park, Phua Hin Rong Kla; the surroundings were very different to the treks in the first part of the tour. The area we explored used to be a major stronghold of communist insurgents, which were eventually defeated by the Thai government forces in 1982. After the communists defeat, the area was surveyed and it was decided that because of its natural beauty and the fact that it had many historical points of interest it should be protected from development and hence it was declared a national park in 1984.

Peter explained last night that in this park we could get very near to where we were trekking in the minibus, leaving only a short walk to the area to be explored. This meant there was no need to split the tour members into two different groups depending on fitness level, all 24 of us could go on exactly the same trek.

When we arrived we visited the park's information centre where there was an interesting photographic display about the park's history and a collection of artifacts from the battles involved in overcoming the communists.



Figure 38: *Luisia curtisii*

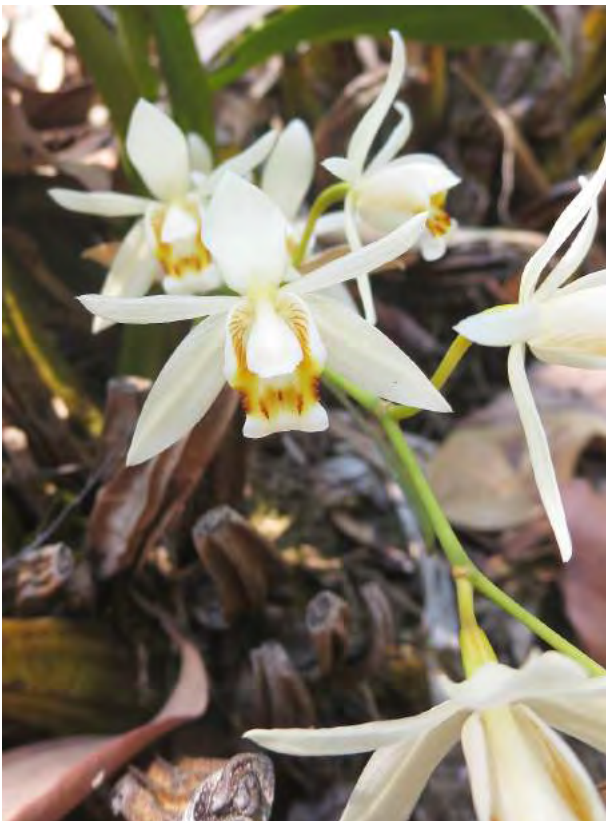


Figure 39: *Coelogyne flaccida*

We also watched a short film which highlighted the park's attractions. We then walked a short distance to the area which has been visited many times previously on the tour. It is known locally as "Broken Rock Field" due to the dense rock formations which form the ground.

Even though it was in direct sunlight it was surprisingly cool compared to the other areas we had trekked in. The surrounding forest was a mixed evergreen type, with a fair few *Pinus* species; the most coniferous trees we had seen in one area whilst on the tour. We followed the main path for a few minutes, veered off the marked trail into the adjoining forest, then stepped out onto a rocky plateau, blinking our eyes in the sudden searing sunshine like rabbits caught in headlights; the rocks were covered in moss, lichens, ferns and orchids of course!

I wasn't expecting orchids to grow in this type of habitat at all; it was harsh conditions, the moss and lichen covering the rocks were all bone dry, the few shrubs which were out on the plateau were a few rhododendrons

and nothing else. Yet, despite this, the rocks were carpeted in orchids seeming to thrive in the brutal surroundings; coelogyne was the main species colonising the rocks, there was also a large *Bulbophyllum blepharistes* which had several little baby plants growing next to it. It wasn't flowering but still a great find.

The first new flowering species we saw was *Luisia curtisii*. Peter says he expects to see it in this area, once we spotted one we then kept seeing dozens! It had long dark purple stems with tiny whitey-purple flowers, growing on very exposed rocks in full sun. I was fascinated by its root system which was spreading out over the surface of the rocks; when close to the plant the roots were round yet when spreading over the rock they became flattened, to get into all of the nooks and crannies.

There were large clumps of *Thunia* sp. with canes 3 foot high - again a species which wasn't in flower but the size of the canes was extremely impressive. They were growing on the edge of the plateau in semi-shade, instead of in direct sunlight. A coelogyne which was in flower was *Coelogyne flaccida*, two clumps were found both growing in similar conditions; virtually on the ground on the rock surface in semi-shade - it was strongly scented. Again this was another species we hadn't seen yet on the tour.



Figure 40: *Cymbidium aloifolium*

We had plenty of time to amble around and explore the many crevices and vast undergrowth for a good couple of hours. I spotted a species which Peter had never seen in this area before which was the highlight of the day for me! *Vanda pumila* was growing on one of the very few deciduous trees on the edge of the plateau, at shoulder height in full shade - very very close to the edge of a deep ravine!

Although it was quite inaccessible to get to it was worth it to get a close-up view of the white flowers with a purpley-pink inner lip; it not only looked beautiful, it also had a gorgeous scent too.

Peter said there are hardly ever any dendrobiums in this area because they prefer the older, mature trees to grow on, which enables them to reach better light levels as they are much taller than younger trees. We wandered back to the information centre for lunch, which had a cafe nearby. We then drove for another 30 minutes to an area which Peter has been to for a couple of years; last year was particularly memorable because the tour group got slightly lost and ended up stumbling across a clump of *Cymbidium lowianum*!

We didn't have long here because it was getting towards the end of the afternoon by this point but we still went on a short walk and managed to spot *Dendrobium infundibulum* high up in the shady canopy of the trees; we hadn't seen this dendrobium since our first day orchid hunting. I then spotted *Bulbophyllum rimannii*, growing at waist height on a tree in almost full shade, at its peak of flowering; again this was another species we hadn't spotted since our first day.

Finally we saw *Cymbidium lowianum* which had had most of its flowers eaten except for one half-decent one. It wasn't a brilliant specimen by any means, half-hidden in semi-shade on the side of a rock, but it was flowering which was the main thing! We began our long drive back to the resort, where Peter briefed us about the happenings for tomorrow.



Figure 41: *Dendrobium draconis* with *D. trigonopus*

21 Thursday 24th March



Figure 42: *Hygrochilus parishii*

We left our resort in Phitsanulok and travelled further into the east. Our final destination was Loei, very close to the Vietnam border. Loei is the coolest part of the whole of Thailand, hence why we will see certain orchids growing here and no where else.

21.1 Nam Nao

Weather: Sunny, 40 °C

Altitude: 700 m

Forest type: Dry dipterocarp forest mixed with pine trees

We stopped along the way at Nam Nao National Park, entering a protected area and had a short trek which lasted about an hour. The site we explored was an open dry dipterocarp forest with a surprisingly large number of mature *Pinus* species, which most of the orchids were growing on. I wasn't expecting to see this as orchids generally don't like growing on coniferous species because their bark falls off regularly.

The best find came about five minutes into the trek where we spotted *Dendrobium draconis* and *D. trigonopus* growing next to



Figure 43: View from Phu Luang wildlife sanctuary

each other high up on the same tree in direct sunlight. Although we couldn't appreciate the flowers up close, Peter said *D. draconis* is easy to identify because it has a very waxy look to its creamy-white petals and is scented. He also said *D. trigonopus* is unusual as it is the only dendrobium species which prefers growing on pine trees, and is very rarely found on any other type of tree.

We wandered further along the main path and spotted a few branches covered in *D. lindleyi*, alas we were about a week too late to see them at their peak as most of the specimens had finished flowering. We saw one plant of *Vanda lilacina* growing very high up in a tree, with flowers similar to *V. coerulescens*. I much prefer the wild species vandas instead of the mass produced cultivars - the flowers are much more delicate and colours less garish.

Although it was slightly disappointing not to see more specimens flowering en masse, it also showed how unpredictable the flowering times for these orchid species can be, as most of them only have a flowering period of 1-2 weeks; Peter does incredibly well timing the tour to enable us to see as many of the orchids as possible in flower.

We saw a cymbidium which looked almost identical to *C. aloifolium* which we had already seen on the tour, except its flower spikes were hanging all the way down from the centre of the plant - this is a characteristic of *C. pumilum*, as *C. aloifolium* only has its flower spikes hanging at about 45 degrees. Peter needs to compare notes to confirm which species it was, as he wasn't totally convinced it was *C. pumilum*! It was growing at waist height on a fallen tree, in direct sunlight.

We also spotted another species we had seen before, *Hygrochilus parishii*. This time it was growing at shoulder height on a tree in semi-shade, it was perfect for taking close-up photos and to see the flowers in detail - something we hadn't been able to do on the other specimens we had seen as they had been high up in the canopy of the trees.

Although it was a short trek we still saw some different species, growing in another different habitat to what we had previously seen. We arrived at the hotel at 5pm where Peter briefed us about the happenings for tomorrow, our last trek of the entire tour!



Figure 44: *Dendrobium infundibulum*

22 Friday 25th March

22.1 Phu Luang

Weather: Sunny, 21 °C

Altitude: 1,470 m

Forest type: Low montane forest with the dominant shrub cover being *Rhododendron lyi* (white) and *Rhododendron simsii* (red)

Our last trek was superior to the other treks by far, the most rewarding of the whole tour - Peter definitely saved the best til last. We visited Phu Luang wildlife sanctuary, a remote place well hidden from tourists. To enter this sanctuary special permits have to be obtained from the Royal Forest Department in Bangkok, as unlike national parks only authorised visitors are allowed in. Peter obtained these permits prior to the start of the tour.

We needed to have forest rangers to act as our guides as visitors are not allowed to go trekking anywhere on their own. Our group of 24 had two, one at the front leading and one at the back bringing up the rear - it's easy for tour members to get distracted and lose sight of the main group when there are so many orchids to be seen.

I was in awe at the mountainous scenery which had many different kinds of habitat, from dense mixed evergreen forest to stony cliffs and purely rhododendron forest. The plateau is particularly noted for its climate that is reputed to be cool all year round; it certainly felt that way, it was 21 degrees for most of the day with a refreshing breeze too - a complete change to the temperatures we'd had for the rest of the tour! It was a very pleasant climate to go trekking.

The trail we followed for the morning started in a forest of rhododendrons, which were all flowering of course. We saw a sensational little dendrobium early on, *Dendrobium unicum* was unmissable with its vivid orange flowers - the first orange flowering orchid we had seen on the tour. It was growing on trees in the denser forest areas in semi-shade, never any higher than shoulder height.

Another dendrobium we hadn't seen since our first days' trek was *Dendrobium infundibulum*, which was literally everywhere in the wildlife sanctuary; on trees, on rocks, high up, low down, on the ground, in single and multiple clumps, in direct sunlight and semi-shade - it was like an orchid weed!



Figure 45: *Mycaranthes pannea*



Figure 46: *Dendrobium unicum*

I didn't tire of seeing it though, especially when the blooms were facing the pathway perfectly and seemed to be looking at you.

Cymbidium insigne was a cracking terrestrial, we saw several plants in flower with three different colour forms; one almost white and the others varying in shades from red to dark pink. The canes on all specimens we saw were over 2 feet long, with about 6 flowers per cane. They peeked out of the undergrowth, in semi-shade - very different to the other cymbidium we had seen on the tour.

Bulbophyllum minutius was similar to *Bulbophyllum rimannii* which we saw on the first part of the tour; small pinky-red flowers which were translucent when they caught the light. Plants were growing on trees in semi-shade at head height. *Bulbophyllum capillipes* had tiny flowers about 1 cm across, again we saw lots of this species in flower, growing in similar conditions to *B. minutius*.



Figure 47: *Dendrobium chrysanthum*



Figure 48: *Bulbophyllum dayanum*

Dendrobium chrysanthum was easy to spot with its bright yellow flowers; Peter said this dendrobium is unusual in the sense it is epiphytic yet it's always found growing very close to, (virtually on the surface) of the ground, with its roots in moss or lichen. It looked like a strong wind had come along and made it flop over! *Pinalia bractescens* had flowers like *Otochilus fuscus*, which we saw on the first part of the tour. Again we only saw one plant of this.

Bulbophyllum lobbii var. *siamense* is my favourite bulbophyllum find of the whole tour; its flowers were exquisite, pale yellow with clear red venation. They were quite easy to miss in the shady spot on the rock it was growing on, I did a double-take when I saw the beautiful flowers. We came out of the rhododendron forest into a more open area with scattered tree coverage, including

plenty of rocks for orchids to grow on.

Pinalia amica had gorgeous little red and yellow flowers, one plant was growing in semi-shade with its flowers literally flowing over the rock it was nestled into. *Eria siamensis* had distinct upright spikes of white flowers, growing on rocks in semi-shade. This species was quite prolific, the same as *Dendrobium unicum*.



Figure 49: *Paphiopedilum villosum*

We saw a huge clump of *Paphiopedilum villosum* growing on a rock in semi-shade, alas it wasn't in flower! It had finished flowering a few weeks ago according to our guide, all we saw were tantalising glimpses of seedpods - it was almost possible to imagine what the flowers had been like. . .

Bulbophyllum dayanum was another sensational bulbo; it was growing in the crack of a rock in semi-shade, if the guide didn't know where it was we would never have found it! It was the only specimen we saw in flower, the flowers were the weirdest I had seen; a brownish-red colour with yellow fringing to the petals, it almost had the appearance of a carnivorous plant.

Orchids we had seen previously included *Coelogyne flaccida*, which was growing low down on rocks again; and *Dendrobium polyanthum*, at shoulder height on trees in semi-shade. We spotted *Bulbophyllum reptans* growing by the restaurant on a tree in semi-shade, just as we were heading in for lunch! It had a drooping inflorescence with small whitey-yellow flowers.

The trek in the morning was a circular route, we ended up back at the minibuses where we had our packed lunches then set off again for a shorter trek to see more species we hadn't seen before. We saw our second orange-flowering orchid, *Bulbophyllum rugosisepalum*. It was the most unusual looking orchid of the whole tour, with flowers unlike any I had seen before.



Figure 50: *Bulbophyllum rugosisepalum*



Figure 51: *Bulbophyllum lobbii* var. *siamense*



Figure 52: *Dendrobium thyrsiflorum*

1-2 mm across. Unbelievable!

On the way back in the minibus we stopped at the entrance of the sanctuary and spied a tree literally dripping with *Dendrobium gratiosissimum*. It was a spectacular sight, photos couldn't do it justice. We also saw one specimen of *D. thyrsiflorum*, an eye-catching dendrobium with dramatic white and yellow flowers; this clump had three long flower spikes at shoulder height on a tree in direct sunlight.

It had three flowers which looked like slim petals pointing at different angles, coming from tiny pseudobulbs in the crack of a rock in semi-shade. Weird but wonderful!

Mycaranthes floribunda was everywhere, both in bud and flower, growing on rocks in semi-shade and full sun. It had white flowers on long spikes. Another mycaranthes was *M. pannea*; its flowers were very distinctive, orange with the back of them covered in white hairs. It looked like an old man's beard! We saw just one plant growing on a tree in semi-shade.

We then had to really wander off into the undergrowth to find one plant of *Vanda denisoniana*; it only had one flower spike left which hadn't been eaten! It was growing on a tree at shoulder height mainly in shade, however the sun was just starting to shine on the flowers, meaning I could get a great photo. The diminutive *Taeniophyllum pahangense* was growing on a tree in semi-shade at head height; it wasn't flowering but Peter said when it does its flowers are only



Figure 53: Group photo for first half of the tour - photo by Peter Williams

We had a group photo afterwards, including our guides for the day too. They had been magnificent, we wouldn't have seen any of the orchids if it hadn't been for their co-operation. All of us tour members tipped them 100 baht each; Peter pays the guides officially but our payment is a bonus, encouraging them to protect the plants so that future tour groups will be able to see them as well.

23 Saturday 26th March

Weather: Sunny, 25 °C in Loei, 38 °C in Chiang Mai

Today was a long drive back to Chiang Mai from Loei, taking 9 hours to cover nearly 500 kilometres. It was a good time to reflect on the activities of the past few weeks, especially yesterday's final trek. In some ways time has flown by and in others it feels like it was years ago I was arriving in the airport. Tomorrow is our last full day of the tour, half of the tour members are going back to the Queen Sirikit Botanic Gardens and the other half are going to an elephant farm in Mai Taeng. I have never seen elephants in the flesh before so I'm looking forward to this final cultural excursion.

24 Sunday 27th March

Weather: Sunny, 40 °C

Spending the day at the elephant camp was totally different to anything else we had done previously on the tour; we also had time to visit the vanda nursery again which we visited on our first day.

24.1 Maetaeng Elephant Park

Maetaeng Elephant Park is situated alongside the Mae Taeng River and began as a result of the 1989 ban on logging in Thailand. They witnessed increasing numbers of elephants being forced



Figure 54: Elephant rides

to roam the city streets and take up work in the illegal logging trade. With no previous history of working with elephants, Maetaeng decided to create a safe and friendly environment for the elephants and support the park through their visitors.

Visitors can experience the elephants close-up, becoming better informed about the present situation and long term future of Asian elephants. Since 1996, Maetaeng have dedicated themselves to protecting the elephants and sustaining the culture of the mahouts and their families. In 2000, it was decided to use the money raised from selling elephant artwork to fund the purchase of medical supplies needed at the park; in 2009 the Maetaeng officially opened their free elephant clinic.

When we arrived we first saw some of the elephants perform a welcoming show; I wasn't too keen on this idea to start with, as I don't believe in exploiting animals in this way. When the elephants were doing tricks like standing on their hind legs my immediate reaction was repulsion, however it became better towards the end of the show.

The elephants had regular breaks in between showing off their skills, it was obvious from the displays of affection between the elephants and their mahouts what a close bond they had with each other. My favourite trick which left me gobsmacked was the elephant painting; the elephants held a paintbrush in their trunk, which their mahout gave them, and proceeded to draw a very accurate picture of trees, flowers and a rear view of an elephant - all coloured in of course! The sheer precision the elephants had with their trunks was phenomenal, they can draw better than I can! I'd always known they had extraordinary memories but to see it to that extent was incredible.

After the show we went on an elephant ride; another memorable experience! We sat on seats on the back of an elephant with a mahout sitting in front of us, on the elephant's head. It was a strange feeling, quite unstable at first especially going up and down hill, but I was quite used to the gentle swaying motion by the end of the experience.

We went through the river, which the elephants loved splashing around in, and for a short journey through the adjoining forest. I spotted an orchid in flower, *Dendrobium secundum* was



Figure 55: *Cassytha ciliolata*

at the top of a huge tree; it helps to have an elephant's eye view when orchid hunting!

We then went for a ride in an ox cart, very different to the elephant ride but still enjoyable. I spotted another orchid lower down on a tree this time, *Cymbidium* sp. in full flower. We had lunch in the restaurant and looked round the shop, where I picked up a few last minute souvenirs. I was very tempted to get an elephant painting, unfortunately it wouldn't have fitted in my suitcase!

Our last activity was a ride on a bamboo raft down the river. This was very relaxing, I could almost have gone to sleep on the raft! As well as two people steering the raft we also had a very cute dog as company who jumped into the river at one point to cool off! We spotted more orchids on the trees along the river bank, huge clumps of cymbidiums high up in the trees and more dendrobiums lower down.

I also spotted my favourite non-orchid find of the whole tour; *Cassytha ciliolata*, a parasitic plant. I can't be 100% sure that this identification is accurate as I spotted it parasitising *Ficus* sp. trees towering above my head as I floated past on the raft! so not ideal circumstances for identifying it. It was like dodder, (*Cuscuta* sp.) which is seen in the UK. I find parasitic plants fascinating, hence I almost fell off the raft in my excitement!



Figure 56: *Dendrobium secundum* (photo taken at Queen Sirikit Botanic Gardens)



Figure 57: My new extended family!

24.2 Orchid Nursery



Figure 58: Me with our drivers - photo by Phil Gould

The minibuses picked us up down-stream and then took us to the vanda nursery. This was nice as the people who had joined for the second week could experience it as well. I had a slow amble round the gardens, taking in the orchids and other tropical flora for the last time.

We then went back to the hotel and went out for a farewell meal at a local restaurant in Chiang Mai - Peter had arranged this reservation for all 24 of us. It was a bittersweet feeling knowing this incredible journey was virtually at its end; I had met some unforgettable people who I know I'll stay in touch with. The evening was spent eating, swapping email addresses and taking photos - selfies were mandatory of course!

25 Sunday 28th March

Weather: Sunny, 39 °C

Departure day! All of us tour members had flights at different times, the minibus was on hand all day to take groups of us to the airport. Peter accompanied each group and bid us farewell, it was a surprisingly emotional moment once I had said a final goodbye and was waiting in the departure lounge alone.

Part V

Summary

26 Conclusion

The Orchids of Thailand tour was everything I had expected and more. As this was my first trip to a tropical country there was nothing to compare it to, meaning everything I experienced was new and exciting. The main aim I had before the tour were to see the habitats Thai orchids grow in and understand more about their growing requirements; reading books is not the same as living it yourself, nothing gives the same sense of understanding than seeing plants in situ.

I imagined the forests would be thick with dense vegetation, the opposite to the majority of open broadleaved forests we encountered during the tour. Seeing orchids growing in such harsh conditions made me realise how much I pamper them at home! In the wild they're high up in trees, exposed to full sunlight and scorching, humid temperatures, yet are thriving.

I have always seen orchids as wondrous and exotic, with a stigma surrounding them as mysterious, hard to grow plants; while this may still be true for some I'm immensely glad I've been able to see Thai orchids in their natural habitat, and get more of a grasp on how they survive in the wild. This is what I try and recreate at home for all my plants, making the artificial environment as realistic as possible to cater for their needs; I know if I specialise in glasshouse management in the future the knowledge gained from this tour will be invaluable.

The other objective I had prior to the tour starting was improving my identification skills; there are over 1,000 species of orchids in Thailand, the largest genera being *Dendrobium* and *Bulbophyllum*. Seeing such an extensive variety of orchids really puts identification skills to the test.

I felt my skills of identifying dendrobiums in particular improved the most; although the flowers are a key feature in plant identification I wanted to be able to rely on other characteristics like the overall growth habit, leaf formation and size/colour of canes and pseudobulbs. Visiting orchid nurseries and seeing them in cultivation was a perfect way of honing my skills for the true identification test in the wild; at least in nurseries there are labels so you know when you've got it right or not!

It was comforting to visit these nurseries and realise there are legitimate people in Thailand growing and selling orchids, as, unfortunately, so many of the orchids for sale in markets are plundered from the wild illegally. It's criminal to think how some orchid habitats have been lost forever due to these shocking activities.

I was aware of the number of different species of orchids we would see, however it still didn't prepare me for the sheer variety we saw: from the delicate flowers of *Luisia curtisii* to the showy blooms of *Dendrobium thyrsiflorum*; the weirdness of *Bulbophyllum rugosisepalum* to the tiny flowers of *Diploprora truncata*. Every single orchid I saw I loved.

The feeling of hunting orchids in the wild was absolutely addictive; I will never forget the heart-stopping, breathless, out-of-body sensation of finding my first orchid on that first day by the roadside at Doi Inthanon. There's no map or directions when seeing plants in situ, you've just got to keep your eyes sharp and go for it (obviously having local knowledge like Peter is vital as well of course!).

It has always been an elusive dream to see orchids in the wild; something about their alluring presence captivates me, to see so many in their natural habitat as well as finding a species never seen in the north of Thailand before is the highlight of the trip for me. The understated beauty of *Conchidium lacei* will be the first moment which springs to mind whenever I recall the Orchids of Thailand tour.



Figure 59: Group photo for second half of the tour - photo by tour guides

Seeing pictures of orchids in books doesn't do them justice; this tour has given me tangible memories which will outlive the photos in this report.

I love tropical plants of any description, not just orchids, hence why I was like a kid in a sweet shop for the whole trip; I saw a huge number of plants in the wild I had only seen under glass in the UK before. The most memorable were the orchid tree *Bauhinia x blakeana*, frangipani trees *Plumeria acutifolia*, the jade vine *Strongylodon macrobotrys* and the parasite *Cassytha ciliolata*.

Seeing mango groves and sugar plantations en masse as we drove to our various destinations was fantastic, as was the surrounding landscape - completely different to what I had witnessed in previous travels.

Thailand as a country is a winner in my opinion; it is clearly a very poor country yet the Thai people have a genuine, warm hospitality and humour that they are more than happy to share with foreign visitors. It melted my heart to see smiles and hear laughter from Thai children.

Networking with other like-minded, passionate people during the tour and learning from professional orchid growers to keen amateurs like myself made the whole experience even more enjoyable. Nationalities ranged from German to Australian, British to Singapore.

Although I was the youngest on the tour by a good decade it didn't make any difference to how the general group of us got on, especially in the evenings when it was our own free time. I bonded really well with certain people, particularly some individuals from England and Australia.

Hearing about people's experiences with orchids and why they love them opened my eyes into how universally appealing orchids are. Some people were windowsill growers like me, others worked in gardens with orchid collections on a daily basis, some were part of orchid societies and had huge personal collections of orchids at home which they displayed at flower shows, one person had even written a book all about the genus *dendrobium* - for once in my life I felt at home, being surrounded by orchid geeks!

Travelling in any context is always rewarding; as a horticulturist I am fortunate enough to link travel with work, but it never feels that way. What I do for a living is also what I do in my spare time, my day job never feels like work because I love it so much. Being away from home

makes me appreciate the outstanding flora we have in the UK, and stops me taking for granted the exquisite garden I work in. What is on our doorstep is often the most breath-taking, it's only when we leave this behind we realise what we're missing.

There is more beauty in the world than any one person is capable of seeing in a life-time; however I have the intense passion to make this possible. Before I travelled abroad I didn't really know what I was missing but, now that I know what is out there, I have the desire to see more and more. I try to make this benefit not only my personal development but also my horticultural career, as what I gain from this study tour I will share with work colleagues and other plant friends - they will soon be sick of me waxing lyrical about Thailand!

27 Return Plans

I would visit Thailand again without hesitation. My trip visit to Asia was sensational, it is an experience I hope to repeat; not just for the flora but also for the climate and culture. As well as organising a spring tour Peter also organises a tour in the rainy season (July time), depending on how many people are interested.

His spring tour is the most popular, due to the weather and sheer number of orchids guaranteed to be seen. The rainy season tour is shorter, about a week long; the habitats explored are similar to the places seen on the spring tour – but at this time of year time there are a different range of orchids in flower; some orchids only grow and flower during the rainy season.

The forests are full of interesting terrestrial orchids which cannot be seen while on the spring tour because they are all dormant. Returning to Thailand again, when the climate is completely different and seeing new orchids, is something I hope to try and make happen in the future for sure. . .



Figure 60: Me with *Strongylodon macrobotrys* at the Marisa Resort - photo by Phil Gould

28 Budget Breakdown

Description	Amount (£)
Total cost of the tour (including accommodation for the 16 days, breakfast every day, tour guides, all transport whilst in Thailand, entrance fees to national parks/other cultural excursions and water for the entire trip)	£1,170.00
Evening meals for the whole tour	£200.00
Air flight	£504.10
Train from Stroud to Heathrow	£37.10
Travel insurance	£14.49
Vaccinations (rabies, hepatitis A and B)	£170.00
Total cost	£2,095.69
RHS Bursary Award	£880.00
Merlin Trust Award	£590.00
Personal contribution	£625.69

Signature.....

29 Acknowledgements

I would like to thank the RHS Coke Trust Bursary Fund and the Eric Cheseldine Memorial Trust as well as the Merlin Trust for granting me the funding which enabled me to go on the Orchids of Thailand tour. Without their generous assistance being part of the trip would not have been possible, for which I am extremely grateful.

I would like to express my great appreciation to Peter Williams for organising such a truly amazing tour, and for providing me with information and photos for this report.

My heartfelt thanks go to everyone else in Thailand who helped make the tour run smoothly, like our various guides and drivers. The trip wouldn't have been as enjoyable without their warm welcome and humour.

A message of thanks has to go to the other tour members, it's hard being thrown together and spending 24/7 with a group of people you've never met before especially if you don't get on. . . however the majority of us bonded famously well, I now have an extended family in Cambridgeshire and Australia!

The last thank you is to my boss for granting me holiday at an extremely busy month in the season. Having their support for a trip that was purely for my own personal horticultural development means a great deal.

30 Bibliography

30.1 Books

Vaddhanaphuti, Nantiya. *A Field Guide to the Wild Orchids of Thailand*. Silkworm Books. 2001.

Jensen, Michael. *Trees and Fruits of Southeast Asia: An Illustrated Field Guide (Orchid Guides)*. Orchid Press. 2002.

30.2 Websites

Mae Tang Orchids (Peter Williams)

<http://www.theorchidman.com/#/page/home/>

Tropical plants (used for plant identification)

<http://toptropicals.com/index.htm> <http://www.samui-phangan.info.com/samui-tropical-plants-orchids-flowers.html>

31 List of Flowering Orchids Seen

Peter was incredibly strict as to what counted as a “flowering” orchid; we saw several which were in bud at the peak of opening but were not counted on the list. It’s very tempting to add them in, however this list is purely the orchids we saw in full flower. 51 different species were seen in total, 54 is the highest number that has ever been seen on the tour.

A

Acriopsis indica

B

Bulbophyllum capillipes

Bulbophyllum dayanum

Bulbophyllum lobbii var. *siamense*

Bulbophyllum minutius

Bulbophyllum muscarirubrum

Bulbophyllum reptans

Bulbophyllum rimannii

Bulbophyllum rugosisepalum

C

Cheirostylis thailandica

Cheirostylis yunnanensis

Coelogyne flaccida

Coelogyne nitida

**Conchidium lacei*

Cymbidium aloifolium

Cymbidium insigne

Cymbidium lowianum

D

Dendrobium capillipes

Dendrobium chrysanthum

Dendrobium dixanthum

Dendrobium draconis

Dendrobium fimbriatum

Dendrobium findlayanum

Dendrobium gratiosissimum

Dendrobium infundibulum

Dendrobium lindleyi

Dendrobium lituiflorum

Dendrobium parcum

Dendrobium polyanthum

Dendrobium pulchellum

Dendrobium secundum

Dendrobium signatum

Dendrobium thyrsiflorum
Dendrobium trigonopus
Dendrobium unicum
Diploprora truncata

E

Eria siamensis

G

Goodyera thailandica

H

Hygrochilus parishii

L

Luisia curtisii

M

Mycaranthes floribunda
Mycaranthes pannea

O

Otochilus fuscus

P

Pinalia amica
Pinalia bractescens

T

Thelasis perpusilla

V

Vanda coerulescens
Vanda denisoniana
Vanda lilacina
Vanda pumila

Z

**Zeuxine affinis*

*These two orchids had never been seen on the tour before

32 List of Other Plants Seen

Throughout the tour I was wowed by the general tropical flora as well as the orchids. These plants ranged from trees to climbers, the majority of which I saw in the wild and some of which were cultivated plants that had naturalised and were growing along the roadside for example.

I tried to keep an accurate list of plants seen, it's not as comprehensive as the flowering orchid list but can hopefully give an idea of the diversity of the flora:

32.1 Trees and Palms

A

Acacia catechu
Albizia saman
Areca catechu
Artocarpus heterophyllus

B

Bambusa vulgaris
Bauhinia x blakeana
Bauhinia variegata
Bixa orellana
Bombax ceiba

C

Calamus sp.
Carica papaya
Cassia fistula
Citrus sinensis
Coffea arabica
Couroupita guianensis

D

Dipterocarpus alatus

E

Elaeis guineensis
Eucalyptus deglupta

F

Ficus sp.

G

Grevillea robusta

K

Kerriodoxa elegans

L

Lagerstroemia speciosa

M

Macadamia integrifolia

Mangifera indica

Morus alba

Musa sp.

P

Persea americana

Pinus merkusii

Plumeria rubra

Plumeria acutifolia

S

Schima wallichii

Spathodea campanulata

T

Tabebuia chrysantha

Tabebuia umbellata

Tamarindus indica

Theobroma cacao

V

Vitex parviflora

32.2 Perennials and Climbers

A

Adenium obesum

B

Bougainvillea sp.

C

**Cassytha ciliolata*

Clitoria ternatea

E

Etlingera elatior

H

Heliconia sp.

Hibiscus sp.

Hoya sp.

J

Jasminum polyanthum

L

Lantana camara

M

Mimosa pudica

S

Strongylodon macrobotrys

T

Thunbergia laurifolia

Thunbergia erecta

V

Vanilla planifolia

*Only parasitic plant seen on the tour