



### “An Englishman Lost In Paradise”

About 20km North of Chiang Mai, the raucous rumbles of Songthaews, Scooters and Tuk-Tuks dissolve into a lush green silence. For here, deep within the Mae Sa Valley, embedded in the expanse of Doi Suthep National Park, lies the magnificent Queen Sirikit Botanical Gardens.

“The *magnificent* Queen Sirikit Botanical Gardens,” I said to myself as I sat back in a chair from one of the garden’s cafes, sipping my ridiculously refreshing lemon-shake. The sound of the Mae Sa Noi waterfall undulated through the restless trees, the thick honey-sunshined air and into my drowsy mind. Only three weeks ago I was trudging to work, 8am on a cold, drizzly, undeniably English Monday Morning. I could not believe my luck. I sipped my lemon-shake once more, just to check that it was really there and I was really here. Thankfully, it was and I was.

This was not, however, to be an exercise in slothful self-indulgence. My time spent within Queen Sirikit Botanical Gardens (‘QSBG’) was to be spent discovering and learning. The aim at the end, to produce a first-person account of the gardens from the perspective of a total novice in both botany and Thailand – as both a place of culture and natural beauty. A ThaiBotanical idiot, if you like.

Hopefully, this account will be of some worthwhile interest to all those many likeminded visitors to QSBG, those who are bursting with a frustrating cocktail of enthusiasm, enchantment and ignorance. Even if you do know your *acacia* from your *areca*, the following links may give you a flavour of the gardens and prompt an essential visit.

Follow the links to ‘Explore the gardens...’, then continue to discover what is happening behind the scenes, ‘Beyond the beauty...’ of the endless flora.

**'Beyond the beauty...'**

It is easy to visit QSBG, become enthralled in the surroundings and not look beyond the instantly accessible aesthetic beauty. I cannot write about my experiences in the gardens without mentioning their significance as a centre for learning and research. A visit to the gardens should promote awareness in the country's natural heritage and the importance of conservation issues. On numerous occasions I stumbled across swarms of Thai students on an **educational visit**. The gardens are still relatively young, less than 10 years old, and there is much expansion underway. On my visit in December 2001, The **Natural Science Museum** was in its closing stages of construction, with the carpenters adding finishing touches to the displays. It looked auspiciously impressive. I had the pleasure of a guided tour around the **scientific research** laboratories where an important project was underway, classifying the limitless Thai flora. "We hope to, soon," said Mr. PeeTom in-between strides, midway through the climber trail, "have detailed information labeling every plant and tree in the gardens." One major ongoing project I have previously alluded to -one of utmost importance- involves the conservation of endangered species of Thai flora.

### **The Orchid Nursery**

Still within audio range of the falling of the Mae Sa Noi waterfall, there lies a nursery containing one of Thailand's most evocative plants, the orchid.

One of the first things I noticed on entering the orchid nursery, was its enshrouding in a light, cool spray - a feature of limitless value on a hot clammy day. This spray, however, was not there to cool the brows of foolish English out in the midday sun. It was there to maintain both suitable moisture and temperature as found in the higher altitudes where wild orchids thrive.

The family *orchidaceae* is extremely diverse and, discounting hybrids, is composed of about 30,000 species of which nearly 1,200 are scattered throughout Thailand. They can be characterised as being either terrestrial (grow in the ground), saprophyte (very rare orchids residing underground, emerging only when in flower - much like a mushroom), or epiphyte. The majority of wild orchids are epiphytes, which means that the roots cling to a larger host -usually a tree- but without causing any harm as a parasite would. One of the flower's most striking features I observed, was the 'labellum', the single brighter member of the three inner petals.

The orchid's variety is overwhelming. Flowers range from bright and vivid colourations to soft hues, with large to miniscule petals of different scents, occurring singly to a few-per-stem to large clusters. Annually, most wild orchids flower just once, though at different times of the year. So there is some guarantee that on a visit you will see some varieties in flower. My visit occurred in early December and, although I saw a few blooms, I was instructed that many orchids flower during February and March. "The orchid is an extremely complicated and diverse flower," Mr. PeeAke, the resident orchid expert informed me, "they have a fascinating evolution and scientists are still struggling to understand them."

Wild orchids are in danger of extinction as dealers are collecting them in increasing numbers to sell to international markets. Most market-orchids are hybrids, cultivated through self or cross-pollination to produce brighter and larger petals. However, wild orchids are still illegally harvested throughout Thailand's diminishing woodland. The ideal way to preserve the wild orchid population should be to leave them in their natural environment. However, there is justifiable cause to cultivate a small number for research and conservation. The orchid nursery then, fulfills dual purposes –as does much of QSBG flora- in offering a beguiling experience to the visitor whilst helping to conserve Thailand's native orchid.

### **Herb & Thai Plant Nurseries**

The herb and Thai plant nurseries are situated amongst the garden's higher altitudes, near to the glasshouse complex. Being a self-confessed botanical dullard, the only herbs I had previously encountered were those used in cooking: parsley, coriander, basil, mint, etc. As I strolled into the **herb nursery**, I was faced with a glut of foliage and at once abandoned my preconceptions of the herb as merely a cooking supplement. There were far too many species for me to list here and each with an almost equally long list of possible uses.

The number and variety of herbs endemic to Thailand astounds me. Moreso, it is the medicinal uses that these herbs are said to possess that is staggering. Going back hundreds, sometimes thousands of years, these herbs have been used to treat certain maladies. Modern scientific research has proven many of these uses to be valid. However, this is very much ongoing research: some medicinal herb use remains blind conjecture whilst some herbs have implicit medicinal benefits that are yet to be discovered. Some people claim that herbal 'folk' remedies are outdated; I cannot see this being the case. Perhaps, sometimes, the reasoning behind the use could be considered

outdated, but it seems logical that man should seek medicine from the environment to cure an illness caused by the environment. Medicinal plants are also used in food and cosmetics industries. Considering all possible uses, some three hundred species are used today in worldwide industries.

The **Thai plant nurseries** comprise of a collection of plants widely used in gardens throughout Thailand, mostly for ornamental purposes. If you're a begonia fan, this is the place to come. If not, there are many other plants that will catch your eye (before you know it the pen is out and you're jotting down names). There is a wide range of *Anthuriums* of vivid colours, with alien-antenna-like spadices. The aptly named 'flamingo flower' (*anthurium scherzarianum*) stood out, brilliant pink with a spadix bent into a flamingo like gait. A less lurid and more subtly beautiful flower that appealed to me, was the *oxalidaceae* 'nice butterfly', related to the humble buttercup.

### Glasshouse Complex

The impressive glasshouse complex dwarfs the herb and Thai plant nurseries. Comprising of four different glasshouses, focussing on ferns, rainforest, and arid and aquatic flora. Although the others are no less interesting, I found myself (shallow as I am) being drawn to the more elaborate **rainforest glasshouse**. Its inner circumference boasts a canopy walkway, from which you can look down upon a gushing waterfall; all the while you yourself are gushing as you sweat to the balmy 85% humidity. As I ducked beneath a mock-rock tunnel, I was instructed that the glasshouse aimed to reproduce each environment experienced within a tropical rainforest. Now, I can't see how a claustrophobic rainforest atmosphere could be achieved with just a few thousand square metres to play with and I don't think that this is an exception. However, this glasshouse is without doubt impressive and one of the highlights of QSBG. Plants that I could identify included several palms, cycas, ferns and a few banana plants. The Latin names are clearly displayed: *arecaceae* for the palm family and *musaceae* for the banana family to name a couple. All plants in QSBG are labeled according to their Thai and Latin names. So, unless you can read Thai-script, you soon begin to identify the various plants with the Latin nomenclature.

As a plant, ferns are not instantly appealing. They lack the charisma of the orchid or the romance of the Lotus. You would not for instance, when out romancing over dinner with a loved one, reach under the table to '-Voila!'- make a gift of a fern. Having said that, when studied, they are remarkable plants. Ferns are part of a natural group of plants known as the *pteridophyta*. They reproduce by tiny spores carried in sporangia – grouped as sorus, usually found on the underside of the fronds. These spores are distributed on air-currents over large distances. Therefore, they exhibit a general variation over

geographical distances. *Pteridophytes* are probably the longest surviving form of vegetation on Earth; they have been prominent for millions of years, dating back to the carboniferous period. With this history behind the fern in mind, a walk through the **fern glasshouse** gains a new perspective, sprouting new fronds of interest.

In Thailand, the phrase 'aquatic plant' is almost synonymous with the lotus. It then comes as no surprise to see the lotus dominate the **aquatic plant glasshouse**. Lotuses are beautiful plants and reign highly in the hearts of the Thailand people. Their symbolism of purity re-appears in a variety of festivals, including weddings and the Buddhist festival, Loy Krathong. They comprise of the *nelumbo* family and flower during mid-summer. The young plant's large waxy blue-green leaves lie on the water-surface. However, stalks soon emerge, lifting the leaves into the air. The flowers bloom above these leaves and only last for about three days. As the petals open during midday, they expose a beautiful seedhead. I say all this but I didn't see any of it for myself. During my visit in the Thai winter, all that was visible was the young floating leaves. However, this elusiveness makes the event of seeing them in flower all the more special, merely adding to their appeal.

### Nature Trails

In QSBG, there are three nature trails. They are scaled by the amount of exertion required to surmount them. I was lucky (or stupid) enough to tackle them all on the same (very hot) day, cunningly leaving the hardest until last. Thankfully, there are a number of cafes crouching behind unsuspecting shrubberies, scattered about the garden; like finding a Starbucks in the Sahara when your bones feel like they have the consistency of jelly and you're sweating so much some vigilant passer-by has issued a flood warning.

The most relaxing trail, and most popular, is the **rock-garden trail**. Situated near the entrance to QSBG, it gently meanders around the Mae Sa Noi waterfall, up through the pretty ornamental plant collections, passing the rock garden and ending at the orchid nursery. Peppered along this trail are shady lawns, beckoning you to stop for a picnic or just stop and sit and do nothing but soak up the surroundings.

Now, a little further into QSBG, appears the **arboretum trail**. Slightly more vertiginous in stature –more steps to tackle that is- but still a very pleasant walk. Amongst the sun-dappled plants there are *arecaceae*, *musaceae*, *pinaceae*, *moraceae* and *zingiberceae*. For those not yet up on their Latin references (including me) they are respectively: palm, banana, pine, fig and ginger families.

The last and most challenging trail is the aptly named **climber trail**. I lost count of the number of steps when I blacked out from exhaustion. Okay, so it's not that bad: a windy stepped walk up through and amongst a variety of climber plants. Towards the top of the trail there is a wooden balcony, a peacefully beautiful spot to rest for a suitably long while. If you're wary of the climb, you can always hitch a lift to the top (maybe to the glasshouses) and then walk down. This way there's the added bonus of a café at the end of the descent.

## **The Forests**

As you perambulate your way around QSBG, you are constantly aware of the ruptured horizon and the billowing forests of mountains of forests. All that is visible is part of QSBG, an extension of Doi Suthep National Park, one of a number of protected forests in Thailand. The current Thailand government are increasingly concerned with the country's ecology and plant and wildlife conservation. QSBG is, after all, part of the botanical garden association and the Prime Ministers Office; a government funded project. The current King and Queen of Thailand, King Bhumibol and Queen Sirikit, for whom the Thais have a great respect, have also played an integral role in developing this awareness. During my time at QSBG, the King's birthday passed. I was overawed by the amount of respect and love shown toward this 'King of the people'.

However, current environmental policies could not be more incongruent with those of the past. Throughout Thailand's 20<sup>th</sup> Century, shortsighted economic development has led to a rapid deterioration in the country's forests and vascular plant populations. The situation is slowly improving, over the last 30 years, half of Thailand's forests -with over 15,000 vascular plant species- have been declared to be protected National Park. Queen Sirikit particularly, has contributed much to this increase in environmental awareness; she still visits the gardens she granted the use of her name, QSBG, every January. These National Park habitats are hugely wide ranging, characterised by high humidity and high temperatures: mixed deciduous, dry dipterocarp, semi-evergreen and hill-evergreen forests in the North, tropical rainforests in the South and mangrove swamp along the coast. One of the King's major contributions has been his introduction of the 'miracle grass' Vetiver. Vetiver grass, with its characteristically long roots, maintains soil moisture, restores forest fertility and acts as an excellent control in soil erosion. Two major awards were granted to the King for this discovery. The grass can be seen in use throughout QSBG wooded areas.

## **All The Happy Faces**

The strongest wheel in the QSBG wagon is the boundless enthusiasm of the Thai people who run the gardens. They go about their daily tasks with a joyful devotion and, for me, it was a pleasure to live and work amongst them and I owe them all thanks. The ever considerate Dr. Suyanee and Miss Kanokwan; everyone in the herbarium (repeatedly gifting me chocolate milkshake and doughnuts at 9am, the perfect way to start a day); Mr. Meeku who went out of his way to teach me about Thailand's geography whilst plying me with beer; little Nuch for repeatedly beating me at badminton and being so fizzily ebullient about it and everyone who tried to suppress their sniggers (unsuccessfully) at my diabolic attempts to speak Thai. I hope, if you decide to visit QSBG, you have the pleasure of meeting all the people I did.

## Contacts & References

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