



Nepenthes ampullaria

The tropics are a bit of mystery to most temperate botanist and gardeners. Understandably, we don't cultivate many of the plants found there in our gardens or even indoors. Yet, they are fascinating plants even if it is a bit hot and sweaty trying to find them. In fact, some of my earliest plant hunting efforts concerned these plants, long before I turned my attentions to the Silk Road and other delights.

I vividly recall hiking up narrow tracks to

ridgelines in the cloud forest of Malaysia, entering a stunted forest, draped with wisps of moss and there nestled at the base of shrub was a cluster of pitcher plants - *Nepenthes macfarlanei* to be precise. Here was a plant a young horticulturist had long wondered about, but never dreamt of just stumbling upon them growing wild. It was the sight of these tropical plants that first captured my imagination and fired the desire to experience plants in their true wild homes.

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One of the best if not, the best place to see these unique plants is Borneo, in particular Sabah in the north. This large island is home to quarter of the world's 170 species. *Nepenthes* develop their characteristic pitcher from an extension of the leaf petiole that grows out from the end of the leaf. It is quite mindboggling how this happens, but an insignificant little stump slowly grows, then inflates and opens into a pitcher, ready to lure and capture passing invertebrates or anything else foolish enough to venture too close



Nepenthes rafflesiana



Nepenthes rajah



to the slippery rim and fall into the fluid inside. This fluid contains enzymes which slowly digest the incumbent, providing valuable nitrogen for the plants. And, *Nepenthes* typically grow on nitrogen poor substrates. They also typically have two type of pitcher, a lower one, invariably rounder and squat and a usually slenderer upper one, though these can look markedly different at times.

Lowland species often favour swamp forest and it's here one can find the fangs of *Nepenthes bicalcarata* growing side by side with wonderful piles of *N. ampullaria*, that produce so many pitchers it's a wonder anything can crawl across the forest floor without being ingested. A third species to found here is *N. rafflesiana* with attractive marbled, frilled pitchers.

All very good, and all very hot and humid. The great thing about Sabah is towering Mount Kinabalu, a 4095-metre hulk of granite that dominates the state. Here at cooler more refreshing altitudes there are several more species. For those with the legs a hike up to the rarefied heights of 3000-metres or more will bring one to the realm of *Nepenthes villosa*, one of the loveliest species and these dangle from mossy trees alongside the golden trusses of *Rhododendron lowii*. Elsewhere are the modest necklaces of *N. tentaculata* and the biggest of them all - *N. rajah*. Pitchers of the latter can hold over a litre of fluid and are reputed to

Nepenthes rajah



Nepenthes tentaculata



Coelogyne rhadobulbon







Rafflesia pricei

capture lizards and mice too! They grow on some of the poorest soils on the mountain, hidden away in discreet populations where they sometimes associate and rhododendrons (of which there are many species) and orchids such as *Coelogyne rhadobulbon*. The mountain is home to hundreds more and one rare slipper orchid it is famous for is *Paphiopedilum rothschildianum*, a very rare and desirable species, now closely protected with its locations kept secret. Luckily, they grow and flower in the botanic garden at Poring.

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It is also close to Poring that the tropical botanist has a great chance of seeing another truly remarkable flower, in fact the world's largest. Forest patches in this area have the vines which Rafflesia keithii choose to parasitise. Emerging directly from the vine stems they develop into larger and larger buds until about cabbage-sized they burst open and dazzle for a week before blackening and dying. They smell bad and this is to attract pollinating flies.

The good thing about these rare plants is local people make more money from showing tourist the flowers than from cutting the trees down, so *Rafflesia* helps preserve Borneo's dwindling forests. A second cryptic species, *R. pricei*, can be found in nearby hills too. So, when one has had their fill of the familiar, you know where to come for the weird and the wonderful. Great food too.



Paphiopedilum rothschildianum