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Rambling for Rhododendrons:

Sikkim

29th April – 16th May 2007

By

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The Greentours / Alpine Garden Society tour of the Sikkim Himalaya provided an ideal opportunity to develop my knowledge of the flora of the region. Through immediate experience of natural habitat I was able to increase my understanding of the cultural requirements of this flora. Moreover the tour provided invaluable botanical field-work practice.

“Welcome to Sikkim”

After a two hour drive through the tea, sal and teak plantations of West Bengal, along roads lined with monkeys¹ like hairy priapi, we arrived at what looked like the gateway of a Buddhist temple, adorned with the words “Welcome to Sikkim”. Although the border afforded no immediate change in flora, there was an improvement in road conditions: the sultry chaos of the Indian highway receded; cows, pot holes, dead dogs, motorised rickshaws and detritus no longer littered the road. The monkeys were also absent, perhaps they have difficulty obtaining visas - with its proximity to Tibet, Sikkim is strategically important to India, hence the state is highly militarised and access to many areas is restricted. Army mobilisation probably accounts for the good road conditions and the sikkimese observation of sanitation laws. The huts of Sikkim were also of a discernibly better appointed corrugated-iron: Sikkim benefits from considerable tax relief and is in consequence relatively affluent. As the brochure of the Sikkim Government Tourism Department declares: “It shares borders with Nepal, Bhutan and China, yet it is an island of peace, hospitality and tranquillity with negligible crime rate. Welcome to Sikkim.”

Gushing Film Star Falls: the Kyangnosola Alpine Plant Sanctuary

The first night was spent in Gangtok, the capital of Sikkim and a convenient place from which to visit the Kyangnosola Alpine Plant Sanctuary. Gangtok is situated amongst deep and steep forested valleys at an elevation of about 1600m. The Sanctuary is about an hour’s drive in the direction of the Nathula, a mountain pass (altitude 4400m) on the Tibetan border. On route there were spectacular views back, however the roads being bendy and narrow did not provide many easy photo-halts. Our first stop came at the Mandakini waterfall (altitude 3000m), whilst we waited for the third jeep of our convoy to catch up. The waterfall shares the name of a Bollywood actress; a large image of whom decorates the roadside kiosk, overlooking the paddlers in the plunge pool with saintly patronage. Opposite the kiosk our first rhododendron: *R arboreum*, but growing quite inaccessibly on ground sloping down from the road.

As the road ascended, the forest thinned, the verges sparkling white with wild strawberry. On reaching the sanctuary (altitude 3300m), the trees, now predominantly *Abies densa*,

¹ Rhesus Macaques

were only occasional, standing sentinel-like among the rocks and alpine meadow. It was interesting that many rhododendrons with large shrub characteristics could thrive in such exposed conditions; a contrast to the presumed association with the dappled shade of the woodland garden. Five species of *Rhododendron* were identified that morning: including the rare and endemic *R niveum*, the national tree of Sikkim; unfortunately its purple blooms had been somewhat damaged by a hailstorm two days previously. *R thomsonii* was abundant, providing nectar for flashy Fire-tailed Sunbirds². Seeing this bird feeding was interesting as insects usually effect rhododendron pollination. *Primula atrodentata* was found growing amongst patches of a minute gentian.

We progressed on to the Tsonga Lake (3800m). The lake is revered by the Sikkimese as sacred, this reverence is duly marked by a sign which reads “This lake is sacred, Do not urinate in the vicinity of the lake”. It was also the furthest extent of our permits and so we returned to Gangtok. Travelling back it was realised that our original *R arboreum* was growing at the head of a valley covered in *R falconeri*. We arrived too early for supper and so watched the sunset over the Khangchendzonga range from a local view-point. The group indulged in some camera posturing, lense size causing much admiration in the on-looking natives.

The next morning we bade goodbye to the Lachungpa family, our hosts at the Hidden Forest Retreat. Excellent meals, often made from the produce of the beautiful gardens that surround the accommodation, offered by a man who has co-written a number of monographs on Sikkimese flora. We revisited the view-point, however cloud obscured the mountains. Not a wasted diversion though, as *Arisaema speciosum* was spotted poking up through discarded crisp packets. Heading North afforded the opportunity to visit two neighbouring monastery complexes. Labrang was picturesque, complete with prayer flags, ceremonial horns and novice monks walking contemplatively around (the mini-monk was actually talking on his mobile telephone). The epiphytic orchid, *Cymbidium devonianum*, with its drooping brown flowers, was growing in the courtyard of the Phodong monastery.

The exotic display continued as we travelled through sub-tropical forests: *Datura* and ginger colouring the understorey; Lipstick vines (*Aeschynantus sikkimensis*) and gargantuan cheese plants (*Raphidophya diocura*) dangling from the canopy. Before reaching the town of Lachung, *Dendrobium nobile*, the national flower of Sikkim, was also spotted, a beautiful large white and mauve flowered orchid with a deep purple eye. It was growing on a tree in front of a doorway, acting as a wonderful hanging basket display.

Yumthang, Valley of Flowers and Cricket

The Shingba Rhododendron Sanctuary boasts twenty-four of the eponymous genus and, situated in the Yumthang Valley, is an accessible day trip from Lachung. *Androsace* and *Veronica* peppered the roadside rocks along with the laburnum-like shrub *Piptanthus*

² *Aethopyga ignicauda*

nepalensis. This mountainous terrain seemed an unlikely place for cricket, however notwithstanding the gradient or remoteness of the field, cricket pitches were a common feature of the roadside. Football is also popular in Sikkim, as the captain of the Indian national team is Sikkimese. In fact, Bhaichung Bhutia, having led his team to successive world cup not-qualifying, is something of a hero whose face is used to market all sorts of products throughout Sikkim. Almost as common as the cricket stumps was *Arisaema nepenthoides* (see pl.1), with its unctuously mottled slender spathes, of greenish-brown to reddish-brown, resembling the patina of Mokume Gane metalwork³. *Holboelia latifolia* was also a regular sight, prettily straggled throughout bushes; with tubular to bell-shaped, very sweetly scented blooms, in both a pink and white form, it is a shame that this climber is not more common in cultivation in British gardens.

A backdrop of snow capped mountain; offset by weather blasted silver firs, looking like deformed menorah; carpeted in *Primula dentata*; and with an incredible profusion of rhododendron: the boast of the Shingba reserve was not idle (see pl.2). Noteworthy that afternoon: identification of the similarly mop-top pink flower trusses of *R hodgsonii* (see pl.3) and *decipiens* caused controversy within the group; *R campanulatum* appeared in various shades from pale blush pink to mauve; *R niveum*, unblemished, renewed its acquaintance and there was a large colony of *R wightii* (see pl.4) overhanging the track; *Primula gracilipes* appeared in ribbons around rocky outcrops (see pl.5). *R cinnabarinum*, a lepidote type with waxy tubular pendant flowers of red and yellow, became more common as we progressed further into the reserve (see pl.6). The corolla is fried as a local delicacy, however the leaves and stamens are reported to be poisonous. Sir J D Hooker writes, “many young goats and kids died after eating it, foaming at the mouth and grinding their teeth. When the wood is used for fuel it caused the face to swell and the eyes to inflame.”⁴ Moreover, wild bee honey is best avoided in spring, when it is said to be poisoned by the pollen of *R cinnabarinum*. Just before leaving the reserve, in a marshy area of moss laden boulders, well exposed to sunlight, we encountered rivers of white fragrant flowers belonging to *R ciliatum*, a dwarf shrub rhododendron so named because its leaves, calyx and pedicels are fringed with hairs.

In the hinterland above the hotel *R triflorum* was identified, looking like an overgrown garden azalea; the inflorescence develops in groups of three lemon yellow zygomorphic flowers. Unfortunately a reputed location of *R lindleyi* was not found but the delicate pink *R virgatum* growing in the road embankment under pieris bushes was a consolation (see pl.7).

The following morning we journeyed to the remote town of Lachen. As usual road side stops provided botanical rewards as well as much needed tea and biscuits: *Arisaema tortuosum*, with its gnarled spadix, hiding in the dense undergrowth; *R edgeworthii* like a street lamp, jutting out over the road from the rockface where it was growing lithophytically. *R griffithianum* was also identified its magnificent white blooms

³ A traditional Japanese metal working technique that produces highly decorative surface patterns.

⁴ Chapter XXIII, Himalayan Journals, by J D Hooker.

perfuming the surrounding gorge. It was with pollen of this species that Sir Edmund Loder raised the Loderi Hybrids at Leonardslee, now common in British gardens.

Border Roads Organisation: Poetry Awards⁵

Thunder of the previous night, which had accompanied the usual canine chorus, was the talk of the breakfast table. The group was later comfortingly corrected by our guides, who informed us that concern over storms was unfounded – what kept us from sleep was the sound of local landslips, to which North Sikkim is even more prone than the rest of the country. This was frighteningly evident as we travelled through the Khangchendzonga National Park (see pl.9). The roads are maintained by the Border Roads Organisation (BRO), an adjunct of the army: gutters are kept clear, partly because of paranoia about snakes, but also as a precaution against the monsoon deluge; and, more incredibly, the surfaces are kept motorable despite the frequent awesome devastation of a mountain side giving way. In the event of a slide BRO mobilises a sortie of saree-ed women to sit by the roadside and bash the fallen rock into serviceable aggregate. These peripatetic sororities consist mainly of refugees from Tibet. After the women, one of the first plants to recolonise the scree is *Buddleja asiatica*: a white with yellow throat flowered species, with long narrow racemes smelling of lemon sherbet; a familiar sight as it is grown as a tender shrub on the Surrey estate in which I work.

BRO is also responsible for the many painted, yellow, roadsigns which graffiti even the most isolated tracks in Sikkim. Never giving route directions, these signs are mainly aphorisms, which provided entertainment whenever the journey became monotonous or hazardous.

Considering the instability of the terrain it seems incongruous that rhododendrons have evolved shallow-pan root structures. They are one of the easiest large shrubs to uproot, even in a garden situation, so why has a better form of anchorage never developed in the rhododendrons? Nevertheless their success as a genus has not been impeded in the Sikkim Himalaya; perhaps the shallow rooting enables the plants to travel with the land movement – although no rhododendron surfing was observed during this tour.

Sure Feet and Coltsfoot: the Zemu Valley

An intended 10km hike with a rise in altitude from 2700 to 3300 metres up the valley of the Zemu river afforded some fine examples of *Arisaema griffithii*; a cobra-lily with a spathe that unfurls flappy like an elephants ear, overshadowed by umbrella-like leaves (see pl.11). The catkins of *Salix sikkimensis*, brilliant white reels of silk, also provided interest. Unfortunately our route was impeded before we reached the Green Lake source of the river. With the courageous and balletic aid of our guides, the group successfully crossed a bridge, most of which had plunged with a landslide into the ravine below, to receive the reward of a blazing clump of coltsfoot; however around the next bend a snow patch was considered too treacherous and we returned back to the vehicles. Ironically,

⁵ See Appendix A

Hooker seemed to have been similarly thwarted in this region; in his Himalayan Journal, he writes “I made several ineffectual attempts to ascend the valley to the glacier. The path gradually vanishing...in this wet and miserable valley.”⁶

Driving on to Thangu village for a cup of tea, we passed some specimens of *R campylocarpum*. This species with pale to sulphur yellow flowers and elliptic foliage (similar to *R thomsonii*), was found growing amongst clumps of *R campanulatum* and *R thomsonii*. Some beautiful salmon pink and peach examples were also noted, perhaps natural hybrids (see pl.12). With a habit like *R ciliatum*, but with pink bell shaped flowers, *R glaucophyllum* was seen also, attractively growing alongside the refined looking *Larix griffithiana*.

Just outside Thangu (altitude 3741m), some stubby *Daphne bholua* might have been *R anthopogon*; but, as the army might have laid mines in the area, no botanising was attempted. Nonetheless, from the road, we were able to admire *Anemone obtusiloba* (see pl.13) and the fuzzy golden leaf clumps of *Meconopsis paniculata*.

The Yellow Soldanella: Maenam Wildlife Sanctuary

The sixth morning in Sikkim commenced with a long drive south to Ravangla, the highlight of which was the toilet of a roadside house: the family had rescued a *Dendrobium densiflorum* (see pl.14) from a fallen tree, and were growing it in a pot on the lavatory roof. Some delicious Sikkimese dumplings (*momos*), made for a revitalising lunch just outside the town of Mangan (“the large cardamom capital of the world”⁷). An impromptu stop at an Angora rabbit farm resulted in woolly hat souvenirs and expert advice on local rhododendron distribution.

The hotel, on a hill outside Ravangla, was Buddhist-butlins; a chalet complex with prayer wheels and (as standard in Sikkim) magnificent views of Khangchendzonga. Hooker complains that in Sikkim “Leeches swarmed in incredible profusion in the streams and damp grass, and among the bushes: they got into my hair, hung on my eye lids, and crawled up my back. I repeatedly took upwards of a hundred from my legs, where the small ones used to collect in clusters on the instep: the sores which they produced were not healed for five months afterwards, and I retain the scars to the present day.”⁸ It was in the leucanthemum filled garden of the Ravangla hotel that I sustained my one leech bite. I have been able to contain my disappointment at this aspect of the tour not meeting expectations.

The neighbouring Maenam hill provided a day trek amongst temperate montane cloud forest, with an altitude range of 2100 to 3200 metres. Around the lower flanks of the hill the dazzling *R dalhousiae* draped itself over tree branches. Named, by Hooker, in honour of Lady Dalhousie, the wife of the Governor General of India, this rhododendron has

⁶ Chapter XIX, Himalayan Journals, by J D Hooker.

⁷ Roadsign slogan, outside Mangan.

⁸ Chapter XVIII, Himalayan Journals, by J D Hooker.

large fragrant cream trumpets. A charming subspecies with a yellow to lime flower was also identified (*R. dalhousiae* subsp. *tashii*). The moss around the trees was so thick as to make the trunks resemble rearing bears. Growing within the moss the charming orchid *Coelogyne corymbosa* was a common sight (see pl.15).

At higher elevations the group walked through forests of huge *R. falconeri* trees, their white trusses emerging mysteriously out of the mist across the hillside. The slender arching habit of *Berberis insignis* and *Viburnum erubescens* growing almost as a weeping standard, were both notable shrubs in the understory.

Until the Maenam visit, the weather had been remarkably dry, hence the lack of leeches; however, on reaching a more exposed elevation the group encountered a ferocious storm. Seemingly all of Sikkim's 3894 mm annual rainfall descended in that hour. During the previous year's (2006) scorching summer in Surrey, despite (although it felt like in spite of) strenuous efforts with watering cans, there were many casualties in the rhododendron collection on the estate in which I garden: that rhododendrons originate from climates where weather like the Maenam storm is common throughout summer, makes this loss much more understandable.

The storm past, a further short climb revealed a colony of *Bryocarpum himalaicum*, an alpine gem, morphologically close to *Soldanella*. Unfortunately, owing to the intense humidity my camera stubbornly refused to focus on this enigmatic delight, at best I have recorded what looks like a distressed hoop-petticoat narcissus with primula-like leaves.

Geisha Girl Bark: Dzongri Trek: Ascent (see pl.16)

The final excursion was a five-day trek into the Dzongri region of the Khangchendzonga National Park. Base camp was the village of Yuksom (1700m), a four hour drive due west of Ravangla. Little beacons of pink and psychedelic yellow accompanied the route: this curiosity was *Curcuma aromatica* – wild turmeric (see pl.17). *Dendrobium fimbriatum* var. *oculatum* was sighted; again, a gardener-local, having transplanted to his patio, saved the need for vain neck-craning up into the forest canopy. The entourage consisted of an impressive 10 Dzos⁹, 4 porters, 2 guides and 4 cooks (1 chef + 3 kitchen staff). The kitchen was a primus from which the cook managed to feed the seeming five thousand. The height of fashion among the porters were ankle high golden Wellingtons, reminiscent of Superted's rocket boots, especially considering the effortless way the men scaled the mountainside. At moments when our group was near exhaustion, one of the kitchen staff, usually the aptly named Jalak ("surprise" in Hindi), would appear from beyond the next ridge, kettle in hand, offering cups of tea.

R. arboreum lived up to its name, some specimens growing well above 10m tall (see pl.18). The colour variation in this species was greater around Yuksom than it had been elsewhere in Sikkim (cf see pl.10): ranging from scarlet to pale pink, one example was even a bi-coloured pink/white with freckling. *R. barbatum* had mainly finished flowering,

⁹ Hybrid yaks.

but its new leaf shoots, growing like hairy spears, looked dramatic. Forests of *Viburnum nervosum* and *R falconeri* made for an arcaded walkway, lit with white blancmanges. The mist and mizzle hindered photography, however, they did give the bark of *R hodgsonii* a lugubrious sheen: a grey-mauve colour, like a ghoulish geisha's foundation-powder. *Primula irregularis*, with its heavily incised petals, filled crevices in the undergrowth (see pl.19).

At the end of the second day, we arrived at Kokchurung Campsite (3700m) for what should have been a serene night, tents pitched by the glacial jade river, amongst the electric-violet flowers of *Primula calderana* (see pl.20). Unfortunately, the site was infested with a hiking group who had overstayed. Nonetheless, the primulas and views up to the Goecha La peaks (6700m) were magnificent.

“Clothing needed, summer – light woollens, winter – heavy woollens”¹⁰: The Dzungri Plateau (+4000m)

Camping (see pl.21) in the snow on the alpine plateau, I realised the benefit of the down-jacket and thermal long-johns, which had been expensive suitcase-filler until now. Although well worth the cost, this tour and its horticultural insights would have been beyond my resources, were it not for financial contributions from the AGS Travel Awards, the Merlin Trust and the RHS Blaxall Valentine Awards, for which I am truly grateful. Fingers cold, even within gloves, I felt sympathy for the tourists from Kolkata, who can be seen shivering in “heavy woollens” on the sub-tropical stages of the Dzungri trek.

The peaks of Pandim and Khangchendzonga beyond made a stunning monolithic amphitheatre surrounding the plateau (see pl.22). The bright orange and blue toilet tent looked like Tintin's rocket¹¹, a useful homing beacon in the undulating wilderness (see pl.23 & pl.24).

Throughout the plateau, the minuscule *Primula glabra* was found just emerging above its surrounding blades of grass (see pl.25 & pl.26). *R anthopogon* was present also. The aromatic leaf of this species, mixed with those of juniper, is used as incense in Buddhist monasteries; at high altitude the odour is reputed to cause headache and nausea. Nevertheless, as Mr Lachungpa asserts, “the delicate pink flower that it produces is evidently one of the daintiest in the genus.”¹²

Descent From Dzungri (see pl.27)

Four days further into summer produced new delights for the return to Yuksom: the yellow, lithophytic, aroid *Remusatia hookerana* (see pl.28), emerging from mats of *Sedum multicaule*; *Cardiocrinum giganteum* still only in leaf, but majestic, like green

¹⁰ Sikkim, Brochure of the Sikkim Government Tourism Department.

¹¹ Tintin: Destination Moon, by Herge.

¹² Sikkim-Himalayan Rhododendrons, by S T Lachungpa & U C Pradhan.

chortens¹³ along the path. Before leaving Sikkim, the group visited the Pemayantse monastery. Within the monastery, there is a wooden structure depicting a heavenly palace (Sang-tok-palri), inspired by the dreamed images of Guru Rimpoche. Walking around the monastery, in rooms perfumed with burning R anthopogon leaves, made a relaxing end to the tour.

The tour of Sikkim has increased my knowledge of the flora I encountered. A further reward was that it provided me with a fascinating glimpse into Indian culture. Being a novice, partaking in an organised tour was an excellent means to facilitate my intended experience. The knowledge that the guides and other tour members willingly imparted was most valuable. I recommend that anyone attempting the treks mentioned above invest in a pair of walking sticks. The tour has made me appreciate the difficulties in field photography. I feel that this is an area of possible future study.

¹³ Buddhist memorial structure.

Appendix A

BRO Is Watching You: A Collection Of Sikkimese Roadsigns

“Do not gossip, let him drive”

“Always Alert Accidents Avert”

“Drive with care, make accidents rare”

“BRO – we cut through hill to join the heart”

“Be gentle on my curves”

“Drive slow, live long”

“Road is hilly, don’t be silly”

“Live for today, drive for tomorrow”

“Reach home in peace, not in pieces”

“Driving after whisky is rather risky”

“No hurry, no worry”

“God created Sikkim, we connect it to the world”

“Drink and drive, you won’t survive”

“The future is the path untrodden”

“This is the highway, not a runway”

“Not a rally, enjoy the valley”

“Married driver, divorce speed”

Two billboard advertisements of note: one for an “air-hostess academy”; the other for “non-scalpel vasectomy”, so what do they use?

APPENDIX B

Costing of Sikkim Tour

Tour fee	£2995
Visa	£30
Travel insurance	£89
TOTAL	£3114
AGS Travel Award	£500
Remaining cost	£2614

APPENDIX C

Plate 1

Arisaema nepenthoides

Plate 2

Rhododendron campanulatum and *R thomsonii* in the Shingba Rhododendron Sanctuary

Plate 3

Rhododendron hodgsonii

Plate 4

Rhododendron wightii

Plate 5

Primula gracilipes

Plate 6

Rhododendron cinnabarinum

Plate 7

Rhododendron virgatum

Plate 8

Rhododendron leptocarpum on the roadside between Lachung and Lachen

Plate 9

Larix griffithiana, showing landslip behind

Plate 10

Rhododendron arboreum by waterfall in Zemu Valley

Plate 11

Arisaema griffithii

Plate 12

A possible natural hybrid involving *R campylocarpum*

Plate 13

Anemone obtusiloba

Plate 14

Dendrobium densiflorum in pot above lavatory

Plate 15

Coelogyne corymbosa

Plate 16

View on ascent to Dzongri, above Yuksom

Plate 17

Curcuma aromatica

Plate 18

Rhododendron arboreum growing well above 10m tall

Plate 19

Primula irregularis

Plate 20

Primula calderana

Plate 21

The Dzongri Campsite

Plate 22

Peaks of Pandim and Khangchendzonga

Plate 23

The Dzongri Campsite with surrounding mountains

Plate 24

The toilet tent, Dzongri Campsite

Plate 25

Primula glabra

Plate 26

Primula glabra

Plate 27

View on descent from Dzongri, above Yuksom

Plate 28

Remusatia hookerana

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