

Summertime Plant Watching in North Sikkim[©]

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During July 2012 a group of 12 members of the International Stauden Union (or International Perennial Plant Union), a professional organisation for growers, landscape designers, and botanists engaged on an expedition to North Sikkim, retracing journeys made by the great plant hunter Joseph Dalton Hooker in the mid 19th century. North Sikkim has only become reasonably accessible in the last decade and, even now, has virtually no visitors in July and August because of the monsoon rains, high landslide risk, and treacherous roads. Consequently very few people experience the richness of the Sikkimese flora at the peak flowering season for alpine and herbaceous species. This report highlights some of the notable species encountered at 3,500-4,600 m altitude in the area around the Yumthang Valley.

INTRODUCTION

Sikkim is situated entirely within the Himalaya in the north east of India and bordered by Nepal, Bhutan, and China (Tibet). It has a population of around 600,000 and covers an area of 7096 km² (Figs. 1 and 2). Because of the politically sensitive status of the region (particularly with respect to China) foreigners require a special permit to enter the state and further permits (obtained from Gangtok, the state capital) to enter the heavily militarised district of North Sikkim. However, in the last decade tourism has become a major industry and is officially promoted by the state government.



Fig. 1. Position of Sikkim within India (map source: Wikipedia).

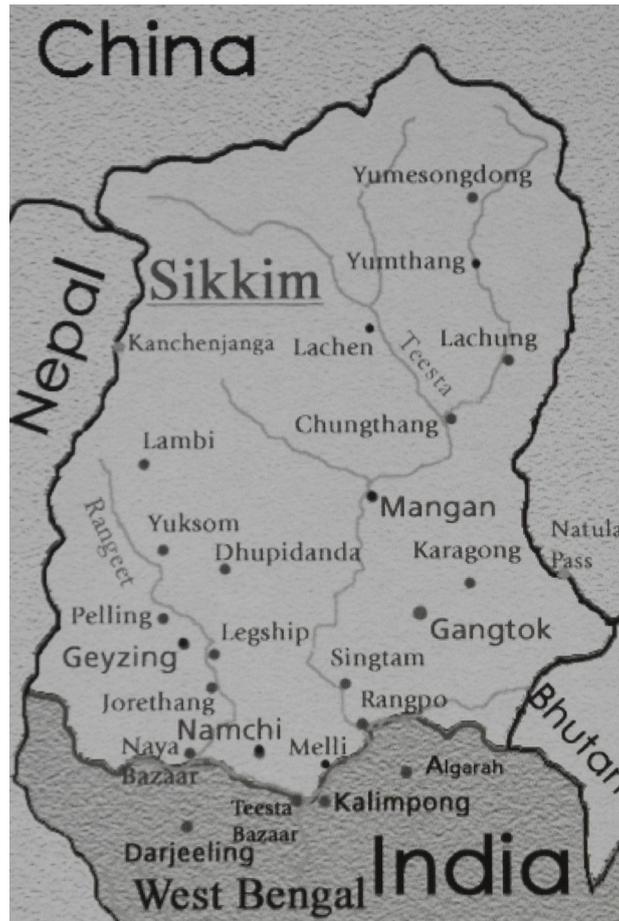


Fig. 2. Political map of Sikkim (map source: Wikipedia).

The south of the state lies above West Bengal in the foothills of the Himalaya and enjoys a year round tropical climate. As one travels further north the climate becomes more temperate and within North Sikkim, above an altitude of 3,000 m, it can best be described as alpine. The highest peaks, which include Kangchenjunga the third highest mountain in the world (8,586 m), have permanent snow cover. The consequence of the range in elevation is an enormous biodiversity which was, no doubt, what attracted the great plant hunter Joseph Dalton Hooker (1817-1911) to explore the region between 1848 and 1858. Hooker's *Himalayan Diaries* (published in 1854) makes fascinating reading and it is possible for the contemporary visitor to relate very closely to many of his observations.

TRAVELLING TO NORTH SIKKIM

Most visitors to the region will start their journey by flying into Bagdogra airport (West Bengal) and travelling by the principle road route to Gangtok that runs along the Teesta River. Initially the journey starts on the flat plains that run down to the Ganges Delta but eventually the first gradient of the Himalayan foothills is reached and thereafter the general direction is always upwards. Gangtok is a city of around 100,000 people and this key single carriageway supply route is subject to congestion, landslides, and occasional blockages that result from actions by political militants.

Most travel guides recommend avoiding Sikkim during July and August, when the monsoon rains further increase the risk of landslide. Tourists – but not the expedition described in this report – generally heed this very appropriate advice. The main mode of civilian travel is off-road four-wheel-drive vehicles – the standard of driving is very

variable. In North Sikkim, where the roads are extremely hazardous, it is important to hire experienced drivers with local knowledge of the road conditions (Fig. 3).



Fig. 3. Driving conditions in Sikkim can be exceptionally hazardous.

BOTANICAL HIGHLIGHTS OF THE YUMTHANG VALLEY AREA

Most botanical excursions to North Sikkim are timed for May and June to coincide with the peak rhododendron flowering season. The most favoured routes involve travelling to Chungthang and then either north-west through Lachen to the Northern border areas or north-east through Lachung to the Yumthang Valley and Yume Samdong (or Yumesongdong). Both these routes were followed by this expedition but only the north east route is described in this report.

The expedition was timed for July (despite travel advice) because it consisted mainly of gardeners and nurserymen with busy work schedules in the late spring. In the event we encountered a huge array of flowering alpiners in peak condition leading those in the group who had visited the region at other times to declare this visit to be the most rewarding.

From a base at Lachung three day-trips were made; some of the principle flora found on them are described below.

North East of Lachung by the Side of the Dombang River

At an altitude of around 3,000 m, and following a road principally used by military vehicles, can be found a range of primarily temperate species suited to a moist, but not saturated, organic soil type. *Euphorbia sikkimensis* and *Roscoea auriculata* grow vigorously in open spaces. Under tree canopies there are several species of *Arisaema* (including *A. echinatum* and *A. jacquemontii*) along with spectacular colonies of the tree lily *Cardiocrinum giganteum*. A particular highlight for many group members were the scented and brilliant white flowers of *Maianthemum oleraceum* (syn. *Smilacina oleracea*) (Fig. 4).



Fig. 4. *Maianthemum oleraceum* (syn. *Smilacina oleracea*) in flower growing in the Dombang Valley.

On a Trail Above the Yumthang Valley

North west of Lachung lies the Yumthang Valley, a destination for many tourists during the main season. One kilometre north of the main tourist area is a recognised trail requiring quite a steep ascent.

In the lower part of the trail, which is shaded by trees, large colonies of *Primula sikkimensis* are found in boggy areas surrounding the mountain streams – along with *P. capitata* and *Ligularia hookeri* (one of several species bearing Hooker's name). At about 4,000 m and above the tree line are alpine meadows packed with diverse species including the minute *P. primulina*. Height is provided by *Meconopsis paniculata*, *Swertia hookeri* (an orange flowered gentian relative), and *Cirsium eriophoroides* (including a spectacular mutant form shown in Fig. 5).



Fig. 5. A mutant form of *Cirsium eriophoroides* above the Yumthang Valley.

There are undoubtedly new plant discoveries to be made right across Sikkim. In this habitat we found a relatively tall (c. 70 cm) but inconspicuous orchid that is not described in the relevant flora and has yet to be identified.

Yume Samdong Valley

Travelling further north of the Yumthang Valley one reaches Yume Samdong, a valley above 4,000 m and beneath a huge glacier. At this altitude blue flowered *Meconopsis horridula* and *M. simplicifolia* become more common, but the most notable species (probably of the whole expedition) is found around the scree – the tall spikes of *Rheum nobile*, the Sikkim rhubarb (Fig. 6). It can only be found in remote areas because it would otherwise be harvested for food.



Fig. 6. *Rheum nobile* at Yume Samdong (photo with permission: Jonas Bengtsson).

At the end of a day in the valley there is a chance to relax in a pool of hot spring-water – which remains at a steady 40°C.

SUGGESTIONS FOR PLANT WATCHERS

The following is some general guidance for those inspired to visit North Sikkim.

- 1) During the monsoon rains of July and August many of the tourist facilities are closed, so although there is plenty of available accommodation, prior bookings should be made.
- 2) Sikkim Law prohibits the removal of plant or mineral material. At Bagdogra Airport expect your cabin and hold luggage to be checked in your presence: Samples of rock can be detected and will be removed, and cameras are randomly checked (so do not take pictures of military activities, even accidentally).
- 3) Any notable plants can be reference tagged using hand-held GPS (this may allow a subsequent expedition to locate the specimen).
- 4) At lower altitude (to about 3,500 m) leeches are prevalent so inspect your clothing regularly.
- 5) Apart from being hazardous, road journeys are slow and subject to delays that can last days so allow plenty of contingency time for all your journeys, especially when

travelling back to the airport to catch your homeward flight.

- 6) From about 3,000 m upwards altitude sickness can occur so some acclimatisation may be required and even the fittest will find their capabilities reduced in the low-oxygen environment.

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Further Reading and Travel Information

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