

# The Flora of Eastern Himalaya

Vol II



Hiroshi Hara

# THE FLORA OF EASTERN HIMALAYA

## SECOND REPORT

Results of the Botanical Expeditions to Eastern Himalaya in  
1967 and 1969 Organized by the University of Tokyo

Compiled by  
HIROSHI HARA

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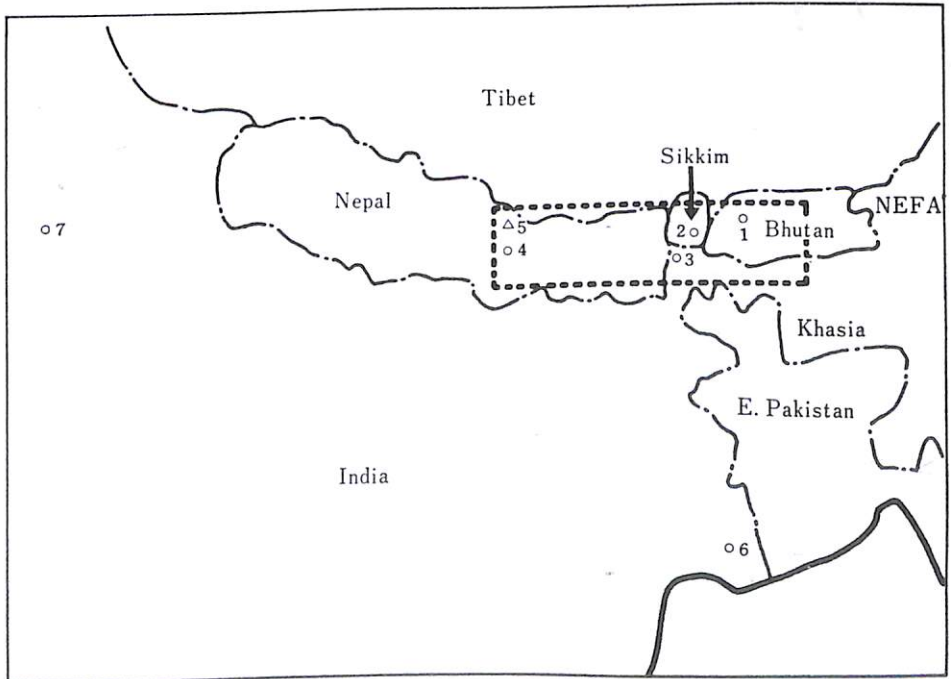
## MEMBERS AND ITINERARIES

### BOTANICAL EXPEDITIONS TO EASTERN HIMALAYA 1967 AND 1969

Members of the March-June 1967 Expedition to Bhutan, Darjeeling and Central Nepal.

Hiroshi Hara	University of Tokyo
Takasi Yamazaki	University of Tokyo
Hiroo Kanai	University of Tokyo
Hiroyoshi Ohashi	University of Tokyo
Osamu Tanaka	University of Tokyo
Gen Murata	Kyoto University

Members of the May-July 1969 Expedition to Central Nepal, Sikkim, Darjeeling and Singalila Range.



- |               |               |
|---------------|---------------|
| 1. Thimphu    | 5. Gosainkund |
| 2. Gangtok    | 6. Calcutta   |
| 3. Darjeeling | 7. Delhi      |
| 4. Kathmandu  |               |

Fig. 1. Sketch map showing our investigated area and its neighboring regions.

Hiroshi Hara                      University of Tokyo  
 Sachiko Kurosawa                University of Tokyo  
 Hiroyoshi Ohashi                University of Tokyo

Information on the members and itineraries of Botanical Expeditions between 1960 and 1964 is given in the first volume of "The Flora of Eastern Himalaya" pp. 1-12 (1966).

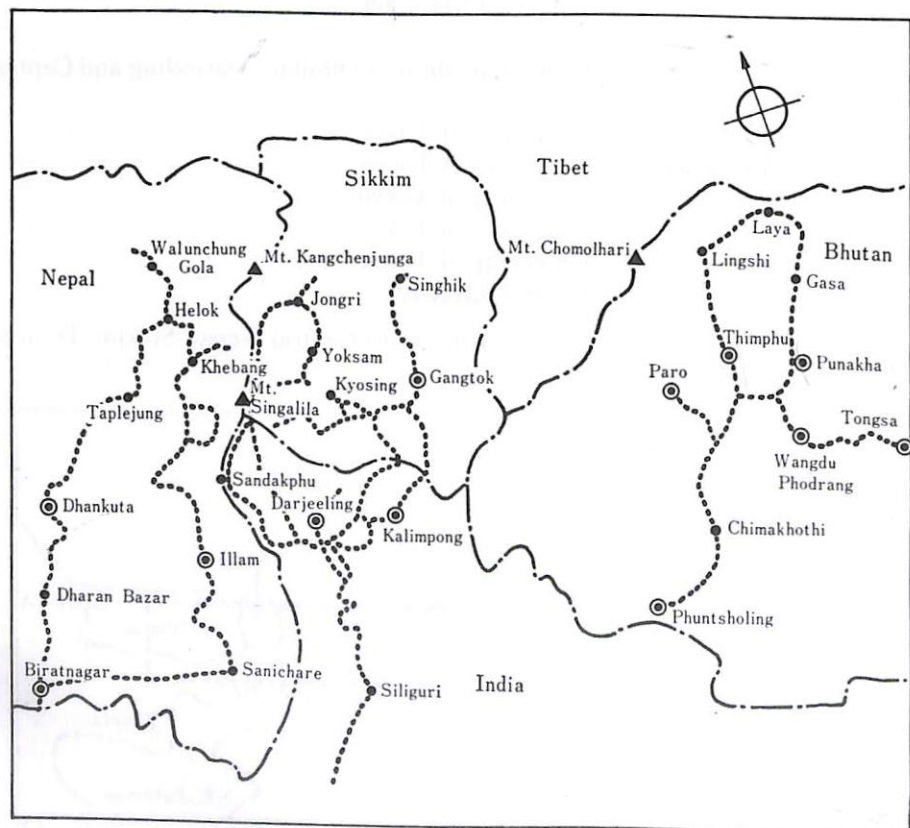


Fig. 2. Our itineraries in E. Nepal, Sikkim, and Bhutan between 1960 and 1969.

The Third Botanical Expedition to Eastern Himalaya, March-June, 1967.

Members: Hiroshi Hara (*H*), Hiroo Kanai (*K*), Gen Murata (*M*), Hiroyoshi Ohashi (*O*), Osamu Tanaka (*T*), and Takasi Yamazaki (*Y*). (Italicized capital letters indicate name abbreviations).

March 21 1967    *H* Calcutta→Darjeeling (2150 m)  
 24                Darjeeling⇌Senchal (2450 m)⇌Ghum (2300 m)  
 25                Darjeeling (Birch Hill 2100 m)  
 26                Darjeeling→Calcutta

April 2 1967

- HKMOTY* Calcutta→Hashimara→Phuntsholing (300 m)  
 3 Phuntsholing (300⇌900 m)  
 4 Phuntsholing (300 m)→Putli Bhir (2200 m)→Pasikha (1900 m)→  
 Chhukha Dzong→Thargyal Mathur Bridge (1700 m)→Chima-  
 khoti (2350 m)  
 5 Chimakhoti (2350 m)→Bunakha (2200 m)→Tanalum Bridge  
 (2200 m)→Kypacha→Nimchling (2350 m)→Thimphu (2450 m)  
 6 Thimphu (2450 m)  
 7 *HMTY* Thimphu→Nimchling *KO* Thimphu (2450⇌2800 m)  
 (2350 m)→Paro (2500 m)  
 8 Paro (2500 m)→Thimphu  
 (2450 m)  
 9 *HKMOTY* Thimphu (2450 m)→Sintoka Dzong→Dochu La (3200 m)→  
 Yuwak (1600 m)→Wangdu Phodrang (1450 m)  
 10 Wangdu Phodrang (1450 m)→Water Fall (1500 m)→Nyatoka  
 (1500 m)→Kyebaka (1600 m)→Samtengang (2100 m)  
 11 Samtengang (2100 m)→Sena Thang (2600 m)→Tsarza La  
 (2800 m)→Ratsoo (2000 m)→Ritang (2600 m)  
 12 *KMOTY* Ritang (2600 m) *H* Ritang (2600 m)→Pele La  
 (3400 m)→Chendebe (2500 m)  
 13 Ritang (2600 m)→Pele La Chendebe (2500 m)→  
 (3400 m)→Rukubi (2800 m) Tashiling (2300 m)  
 14 Rukubi (2800 m)→Chendebe Tashiling (2300 m)→Tongsa  
 (2500 m)→Charikhachor Bridge (1900 m)→Tongsa  
 (2450 m)→Neylong (2400 m) (2200 m)  
 15 Neylong (2400 m)→Tashiling Tongsa (2200 m)→Tashiling  
 (2300 m) (2300 m)  
 16 Tashiling (2300 m)→Tongsa Tashiling (2300 m)→  
 Bridge (1900 m)→Tongsa Chendebe (2500 m)→Rukubi  
 (2200 m) (2800 m)  
 17 Tongsa *KY* Tongsa⇌Tratang Rukubi (2800)→Pele La  
 (2200 m) (2700 m)⇌Uto La (3400 m)→Ritang (2600 m)  
 Road (2950 m) →Ratsoo (2000 m)  
 18 *MO* Tongsa⇌Tratang Ratsoo (2000 m)→Tsarza La  
 (2700 m) (2800 m)→Samtengang  
 (2100 m)→Wangdu  
 Phodrang (1450 m)  
 19 *KMOTY* Tongsa (2200 m)→Tongsa Wangdu Phodrang (1250 m)  
 Bridge (1900 m)→Tashiling →Dochu La (3200 m)→  
 (2300 m) Thimphu (2450 m)  
 20 Tashiling (2300)→Neylong Thimphu (2450 m)  
 (2400 m)→Charikhachor  
 (2450 m)  
 21 Charikhachor (2450)→Chendebe Thimphu (2450 m)→Chima-  
 (2500 m)→Rukubi (2800 m) khoti (2350 m)  
 →Longteping (3150 m)  
 22 Longteping (3150 m)→Pele Chimakhoti (2350 m)→

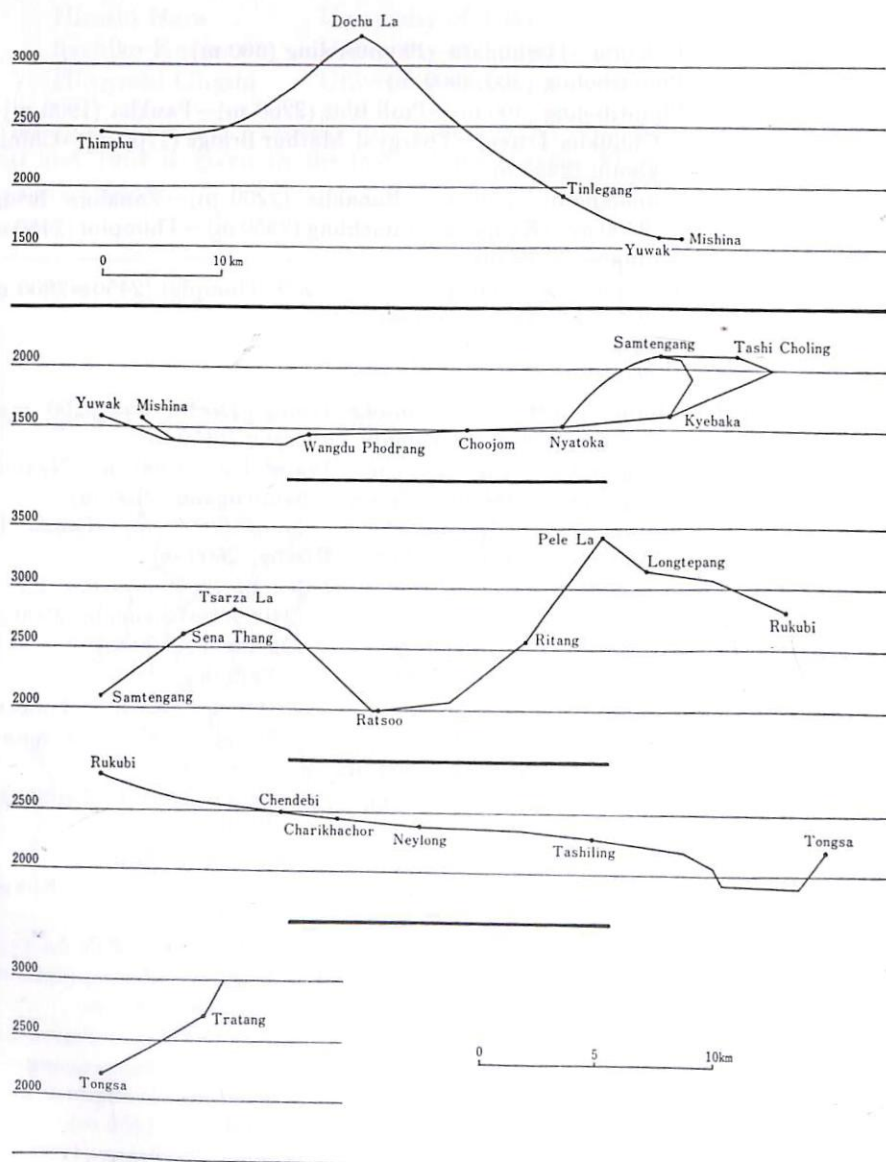


Fig. 3. Vertical route sections of the first trip of Bhutan in April of 1967.

	La (3400 m)→Ritang (2600 m)	Phuntsholing (300 m)
April 23 1967	Ritang (2600 m)→Ratsoo (2000 m)	H Phuntsholing (300 m)→ Siliguri (200 m)→ Darjeeling (2150 m)
24	Ratsoo (2000 m)	Darjeeling (2150 m)

April	25	1967	Ratsoo (2000 m)→Tsarza La (2800 m)→Sena Thang (2600 m)→Samtengang (2100 m)	<i>H</i>	Darjeeling (2150 m)→Rangpo (350 m)→Gangtok (Orchid Sanctuary 1600 m)
	26		<i>MOY</i> Samtengang (2100 m)→Tashi Choling (2100 m)→Kyebaka (1600 m)→Choojom (1500 m)		Gangtok (Rumtek, Saramsa 1050 m)
			<i>KT</i> Samtengang (2100 m)→Kyebaka (1600 m)→Choojom (1500 m)		
	27		<i>KMOTY</i> Choojom (1500 m)→Wangdu Phodrang (1450 m)→Mishina (1500 m)		Gangtok (1650 m)→Darjeeling (2150 m)
	28		Mishina (1500 m)→Dochu La (3200 m)→Thimphu (2450 m)		Darjeeling
	29		Thimphu		Darjeeling (Observatory Hill 2180 m)⇒Ghum (2300 m)⇒Tiger Hill (2500 m)
	30				Darjeeling (2150 m)
May	1	1967	Thimphu		Darjeeling (Ghose Nursery)
	2				Darjeeling→Bagdogra→Calcutta
	3		Thimphu (2450)→Dochu La (3200)→Tinlegang (1950 m)		
	4		Tinlegang (1950 m)		
	5		Tinlegang (1950 m)→Gon Chungnang (1800 m)		
	6		Gon Chungnang (1800 m)→Punakha (1400 m)		
	7		Punakha (1400 m)→Bhotokha (1450 m)		
	8		Bhotokha (1450 m)→Rinchu (1500 m)		
	9		Rinchu (1500 m)→Mishichen (1600 m)		
	10		Mishichen (1600 m)→Khosa (1800 m)		
	11		Khosa (1800 m)→Tamji (2200 m)		
	12		Tamji (2200 m)		
	13		Tamji (2200 m)→Zami Bridge (2250 m)→Gasa (2800 m)		
	14		Gasa (2800 m)→Pari La (3750 m)→Chamsa (3700 m)		
	15		Chamsa (3700 m)→Kohina (3200 m)→Yabu Thang (3400 m)		
	16		Yabu Thang (3400 m)→Tashi Ha (3400 m)→Laya (3850 m)		
	17		Laya (3850 m)		
	18		Laya (3850 m)→Laum Thang (4100 m)		
	19		Laum Thang (4100 m)→Singke La (5000 m)→Chawa Gassar (4200 m)		
	20		Chawa Gassar (4200 m)→Tharizaj Thang (3950 m)→Jari La (4750 m)→Seanchu Passa (3900 m)		
	21		Seanchu Passa (3900 m)→Gokhu La (4400 m)→Chabecha (3800 m)		
	22		Chabecha (3800 m)→Goy (3850 m)→Lingshi (4100 m)		
	23		Lingshi (4100 m)→Yale La (4800 m)→Shodu (4000 m)		
	24		Shodu (4000 m)→Barshong (3700 m)		
	25		Barshong (3700 m)→Nala (3300 m)		



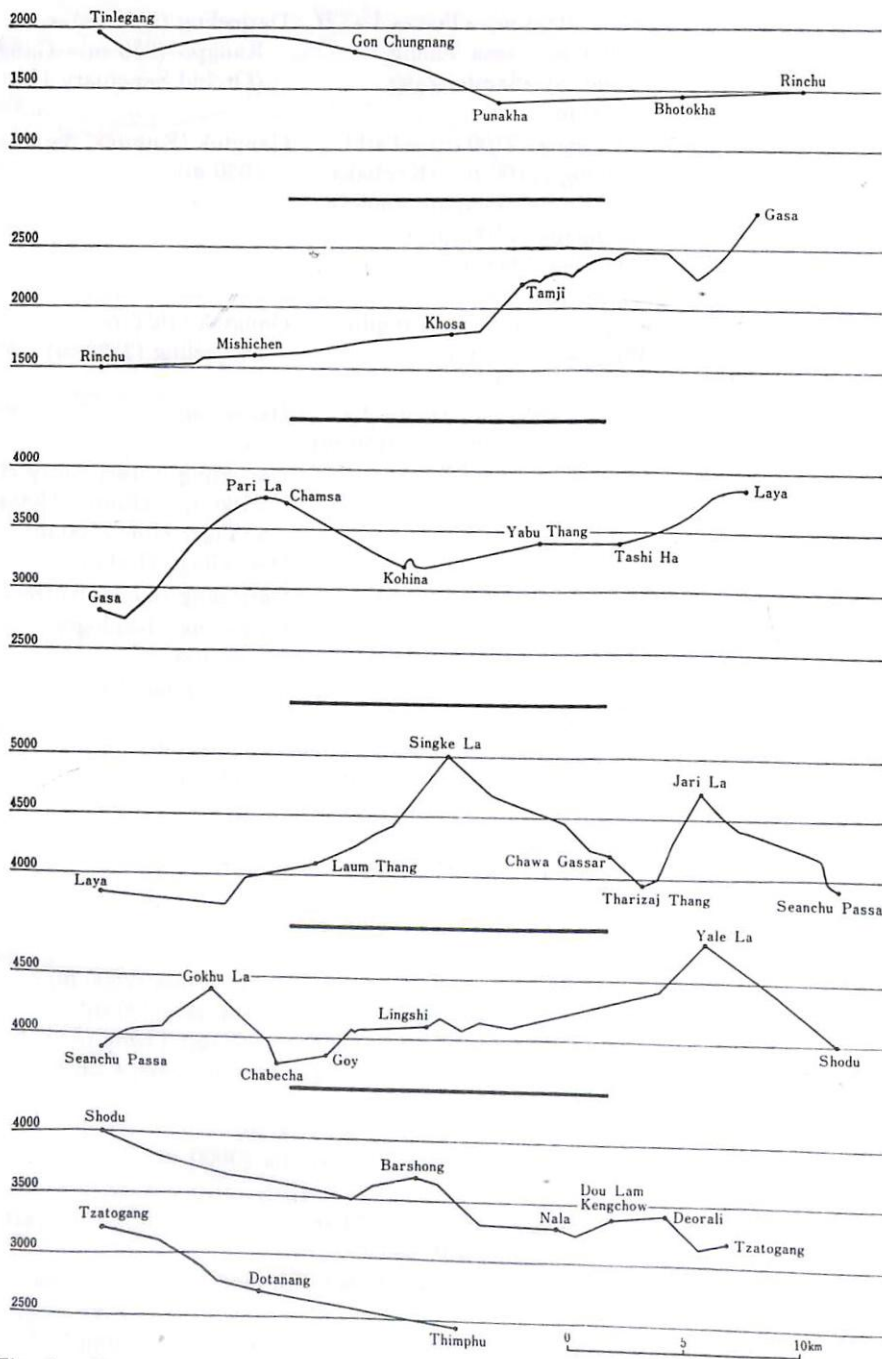


Fig. 4. Vertical route sections of the second trip of Bhutan in May of 1967.

May	26	1967	Nala (3300 m)→Dou Lam Kengchow (3400 m)→Tzatogang (3200 m)	
	27		Tzatogang (3200 m)→Dotanang (2700 m)	
	28		Dotanang (2700 m)→Tabab (2550 m)→Thimphu (2450 m)	
	29		Thimphu (2450 m)	
	30		<i>KMY</i> Thimphu (2450 m)⇌Dochu La (3200 m)	
	31		Thimphu	
June	1		Thimphu (2450 m)→Chimakhothi (2350 m)	
	2		Chimakhothi (2350 m)→Phuntsholing (300 m)	
	3		Phuntsholing (300 m)	
	4		Phuntsholing	
	5	<i>MOTY</i>	Phuntsholing (300 m)→ Siliguri (200 m)→Darjeeling	<i>K</i> Phuntsholing→Hashimara→ Calcutta
	6		Darjeeling (2150 m)	
	7		Darjeeling	
	8		Darjeeling <i>MOY</i> Darjeeling⇌Ghum (2300 m) ⇌Tista Bazar (300 m)⇌Kalimpong (1300 m)	
	9		Darjeeling	
	10		Darjeeling→Calcutta	
	14	<i>KMOTY</i>	Calcutta→Kathmandu (1400 m)	
	15		Kathmandu (1400 m)	
			<i>KMT</i> Swayambhu Nath (1500 m)	<i>MTY</i> Patan (1400 m)
	16		<i>KMY</i> Balaju (1300 m)	<i>MOTY</i> Bhudh Nilkantha (1400 m)
	17		Chobar (1200 m)	
	18		Kathmandu→Pokhara (900 m) (Pokhara Lake 900 m)	
	19		Pokhara→Kathmandu	
	20		Kathmandu (1400 m)⇌Kakani (2200 m) <i>MTY</i> Bodh Nath (1300 m)	
	21		Kathmandu <i>KMTY</i> Gokarna (1400 m)	
	23	<i>KMOY</i>	Kathmandu⇌Godavari (1600 m)⇌ Phulchauki (2500 m)	<i>T</i> Kathmandu→ Calcutta
	24		Kathmandu→Nagarkot (2000 m)	
	25		Nagarkot (2000 m)→Badgaon→Kathmandu	
	26		Kathmandu⇌Godavari (1600 m)⇌Phulchauki (2700 m)	
	27		Kathmandu→Calcutta	

\* \* \* \* \*

The Fourth Botanical Expedition to Eastern Himalaya, May–July, 1969.  
Members: Hiroshi Hara (*H*), Sachiko Kurosawa (*K*), and Hiroyoshi Ohashi (*O*).

May	26	1969	<i>HKO</i> Kathmandu (1400 m)
	27		Kathmandu
	28		Kathmandu (Godavari Botanical Garden)
	29		Godavari→Phulchauki (2100 m⇌2800 m)
	30		Kathmandu
	31		Kathmandu

June	1	1969	Trisuli→Bainse (800 m)→Sim Chautara (Laharepoa 970 m)
	2		Sim Chautara (970 m)→Ramche (1800 m)→Thare (2200 m)
	3		Thare (2200 m)→Dhunche (2100 m)→Trisula Khola (2065 m)
	4		Trisula Khola (2065 m)⇌Gosainkund (3000 m)
	5		Trisula Khola (2065 m)→Dhunche (2100 m)→Thare (2200 m)
	6		Thare (2200 m)→Grang (1900 m)→Ramche (1800 m)→Sim Chautara (970 m)
	7		Sim Chautara (970 m)→Bainse (800 m)→Kathmandu
	8		Kathmandu (1400 m)
	9		Kathmandu
	10		Godavari→Phulchauki (2600 m⇌2800 m)
	11		Kathmandu (1400 m)
	12		Kathmandu (Swayambhu Nath, Patan)
	13		Kathmandu
	14		Kathmandu
			O Kathmandu→Shioupuri (2700 m)      H Kathmandu→ Calcutta
	15		Shioupuri (2700 m)→Kathmandu
	16	KO	Kathmandu
	17		Kathmandu
	18		Kathmandu→Calcutta
	22	HKO	Calcutta→Darjeeling
	23		Darjeeling (2150 m)
	24		Darjeeling (Birch Hill 2100 m, Lloyd Botanical Garden)
	25		Darjeeling (Observatory Hill, Ghose Nursery)
	26		Darjeeling→Kalimpong→Pakhyon (1700 m)→Gangtok (1700 m)
	27		Gangtok (Orchid Sanctuary 1600 m, Rumtek, Martam 1800 m)
	28		Gangtok→Namli (900 m)→Middle Camp (800 m)→Papung (500 m)→Temi (1620 m)
	29		Temi→Damthang (2150 m)⇌Tendong (2900 m)→Temi→Gangtok
	30		Gangtok→Rangrang (900 m)→Singhik (1500 m)
July	1		Singhik (1500 m)→Phyang La (1900 m)→Gangtok
	2		Gangtok→Kalimpong→Darjeeling
	3		Darjeeling (2150 m)
	4		Darjeeling
	5		Darjeeling (East Birch Hill Road 2100 m)
	6		Darjeeling (Senchal 2400 m→Ghum 2300 m)
	7		Darjeeling (Peshok Road 2250 m→Ghum 2300 m)
	8		Darjeeling
	9		Darjeeling (Tenzin Norgey Road 2150 m)
	10		Darjeeling
	11		Mane Bhanjang (2200 m)→Chitrey (2600 m)→Meghma (2850 m)→Tonglu (3150 m)
	12		Tonglu (3100 m⇌2800 m)
	13		Tonglu (3100 m)→Garibas (2800 m)→Kalapokhari (3100 m)→Sandakphu (3970 m)
	14		Sandakphu (3970 m⇌3800 m)
	15		Sandakphu (3970 m⇌3800 m)
	16		Sandakphu→Sabargan (3300 m)→Phalut (3930 m)

July	17	1969	Phalut (3930 m) ⇌ Mt. Singalila (3980 m)
	18		Phalut (3930 m) ⇌ 3800 m)
	19		Phalut (3930 m) → Sabargan (3300 m) → Sandakphu (3970 m)
	20		Sandakphu (3970 m) ⇌ 3800 m)
	21		Sandakphu (3970 m) → Kalapokhari (3100 m) → Garibas (2800 m) → Tonglu (3150 m)
	22		Tonglu (3150 m) → Chitrey (2600 m) → Mane Bhanjang (2200 m) → Darjeeling
	23		Darjeeling (2150 m)
	24		Darjeeling (East Birch Hill Road 2100 m)
	25		Darjeeling
	26		Darjeeling (Senchal 2400 m) ⇌ Tiger Hill 2500 m → Ghum 2300 m)
	27		Darjeeling
	28		Darjeeling
	29		Darjeeling (East Birch Hill Road 2100 m)
	30		Darjeeling → Bagdogra → Calcutta