

Shri Shivaji Education Society Amaravati's
Science College Congress Nagar, Nagpur
Department of Botany
Organized Excursion Study Tour
Kullu, Manali Himachal Pradesh
From 6 September 2019 to 23rd September 2019
Session 2019-2020

REPORT

As a part of B.Sc. Curriculum, excursion tour was organized to Kullu and Manali, Himachal Pradesh by Department of Botany, Science College Nagpur from 16th September to 23rd September 2019 for semester III botany students to study flora in their natural habitat with special emphasis on biodiversity. Total 2 teaching staff, and 90 students were visited to Kullu, Manali. The major objective was to familiarize the students with the wild and cultivated flora and ecology of the region.

Manali is a resort town nestled in the mountains of the Indian state of Himachal Pradesh near the northern end of the Kullu Valley in the Beas River Valley. It is located in the Kullu district, about 270 km (168 mi) north of the state capital 309 km (192 miles) north east of Chandigarh and 544 km (338 miles) northeast of Delhi, the national capital. The small town, with a population of 8,096, is the beginning of an ancient trade route to Ladakh and from there over the Karakoram Pass on to Yarkand and Khotan in the Tarim Basin. It is a popular tourist destination and serves as the gateway to Lahaul and district as well as Leh.

CLIMATE

The climate in Manali is predominantly cold during winter and moderately cool during summer. The temperatures ranges from -7 °C (19 °F) to 30 °C (86 °F) over the year with the hottest day crossing 30 °C (86 °F) and the coldest day going below -7 °C (19 °F). The average temperature during summer is between 15 °C (50 °F) to 30 °C (86 °F), and between -7 °C (19 °F) to 15 °C (59 °F) in the winter. Monthly precipitation varies between 31 mm (1.2 in) in November and 217 mm (8.5 in) in July. On average, some 45 mm (1.8 in) of precipitation is received during winter and spring months, increasing to some 15 mm (4.5 in) in summer as the monsoon approaches. The average total annual precipitation is 1,363 mm (53.7 in). Manali experiences snowfall predominantly between December and beginning of March. Manali is located at 32.2396 N, 77.1887 E, about 547 km (340 mi) north of new Delhi.

FLORA AND FAUNA

Kullu Manali in Himachal Pradesh is the most beautiful destination with salubrious terrain, climate and heights. This has given a growing scope to variety of vegetation, wild

animals and birds at different places and levels. The variety of forests like Sal, Rhododendron, Oak, Fir, Deodar, Birch and Pines are the pride of Manali. These forests shelter for large number of wild animal and birds.

Wildlife among which some rare species like the musk deer, ibex, thar, Himalayan brown bear and snow leopard are still found here. The river Beas offers ideal fishing grounds for trout and masheer.

To protect and conserve its ecosystem, Manali has declared a reserved area - the Manali Wildlife Sanctuary.

Located about 2 km from the Manali town in the picturesque valley of Manali, the Manali Wildlife Sanctuary is reputed for its variety of flora and fauna and breathtaking scenic beauty. Alpine lush green pastures and glaciers beyond gallant thatch beckons the tourists from all around. Spread in an area of 31.80 sq km, the Manali Wildlife Sanctuary houses - Himalayan Black Bear, Himalayan Palm Civet, Barking Deer, Flying Fox, Gorai, Indian Hare, Stripped Hyena, Leopard, Himalayan yellow throated Marten, Serow, Kashmir flying Squirrel and Himalayan Tahr.

The sanctuary has marvelous trekking routes and also have facilities for camping in the wild. The gushing streams, fascinating alpine pasture and high snow covered peaks provide a celestial pleasure to the tourists.

List of local flora:

Sr. No	Common Name	Botanical Name	Family
1	Kashmal flower	<i>Berberies aristata</i>	Berberidaceae
2	Deodar	<i>Cedrus deodara</i>	Pinaceae
3	Horseweed	<i>Erigeron canadensis</i>	Asteraceae
4	Allo	<i>Girardinia diversifolia</i>	Urticaceae
5	Basant	<i>Hypericum cernuum</i>	Hypericaceae
6	Lilyturf	<i>Ophiopogon intermedius</i>	Haemodoraceae
7	Himalayan Cherry Prinsepia	<i>Prinsepia utilis</i>	Rosaceae
8	Sal	<i>Shorea robusta</i>	Dipterocarpaceae
9	Winged prickly ash	<i>Zanthoxylum armatum</i>	Rutaceae
10	Apple	<i>Malus domestica</i>	Rosaceae



B.Sc.III students visited to Manali, Himachal Pradesh from 16th Sept. to 23rd Sept. 2019.

Tour In-charge

Prof. R. N. Deshmukh

HEAD
DEPARTMENT OF BOTANY
SHRI SHIVAJI EDUCATION SOCIETY
AMRAVATI'S SCIENCE COLLEGE
CONGRESS NAGAR, NAGPUR

Sr. No	Roll No.	Name of Students	Name	Father Name	Signature of Students
CBM					
1	865328	Ku Bahety	R	G	<i>[Signature]</i>
2	865400	Ku Bawane	S	H	<i>[Signature]</i>
3	865320	Ku Bawanthade	R	V	<i>[Signature]</i>
4	865362	Ku Bhairam	S	T	<i>[Signature]</i>
5	865386	Ku Bhingare	R	R	<i>[Signature]</i>
6	865480	Chimaiwar	A	D	<i>[Signature]</i>
7	865213	Ku Choudhari	C	R	<i>[Signature]</i>
8	865225	Ku Deshkar	G	A	<i>[Signature]</i>
9	865377	Ku Dhote	S	S	<i>[Signature]</i>
10	865508	Gedam	I	R	<i>[Signature]</i>
11	865262	Ku Ghare	M	M	<i>[Signature]</i>
12	865619	Ku Hadke	T	S	<i>[Signature]</i>
13	865393	Ku Hedau	S	B	<i>[Signature]</i>
14	865209	Ku Hote	B	A	<i>[Signature]</i>
15	865345	Ku Kamble	S	R	<i>[Signature]</i>
16	865222	Ku Khobragade	R	S	<i>[Signature]</i>
17	865577	Lanjewar	J	M	<i>[Signature]</i>
18	865210	Ku Mishra	B	P	<i>[Signature]</i>
19	865216	Ku Mundhe	D	S	<i>[Signature]</i>
20	865543	Pandhrey	S	G	<i>[Signature]</i>
21	865282	Ku Parate	N	K	<i>[Signature]</i>
22	865279	Ku Raghuse	N	B	<i>[Signature]</i>
23	865574	Raipurkar	S	K	<i>[Signature]</i>
24	865390	Ku Salve	S	S	<i>[Signature]</i>
25	865395	Ku Shingade	S	G	<i>[Signature]</i>
26	865264	Ku Thakare	M	S	<i>[Signature]</i>
27	865448	Ku Thakur	V	M	<i>[Signature]</i>
28	865537	Uparkar	N	S	<i>[Signature]</i>
29	865232	Ku Yogoankar	I	P	<i>[Signature]</i>
CBZ					
30	865606	Ambulkar	S	S	<i>[Signature]</i>
31	865414	Ku Banerjee	T	T	<i>[Signature]</i>
32	865327	Ku Bhalerao	R	R	<i>[Signature]</i>
33	865517	Bhoge	K	S	<i>[Signature]</i>
34	865566	Bhopulkar	R	S	<i>[Signature]</i>
35	865317	Ku Bobde	P	P	<i>[Signature]</i>
36	865610	Bramhankar	T	S	<i>[Signature]</i>
37	865273	Chawale	Y	M	<i>[Signature]</i>
38	865353	Ku Chawla	S	J	<i>[Signature]</i>
39	865222	Ku Chauhan	D	L	<i>[Signature]</i>
40	865373	Dhepe	H	C	<i>[Signature]</i>

Sr. No	Roll No.	Name of Students	Name	Father Name	Signature of Students
CBZ					
1	865336	Ku Dhoble	S	V	<i>[Signature]</i>
2	865226	Ku Dhomne	G	K	<i>[Signature]</i>
3	865468	Dhore	A	R	<i>[Signature]</i>
4	865350	Ku Fulze	S	V	<i>[Signature]</i>
5	865594	Fulmali	S	B	<i>[Signature]</i>
6		Ku Gajbiye	J	S	<i>[Signature]</i>
7	865251	Ku Gawande	M	C	<i>[Signature]</i>
8	865329	Ku Gedam	S	S	<i>[Signature]</i>
9	865582	Ku Gedam	S	D	<i>[Signature]</i>
10	865557	Ghonge	P	D	<i>[Signature]</i>
11	865411	Ku Jayswal	S	S	<i>[Signature]</i>
12	865518	Kakde	S	A	<i>[Signature]</i>
13	865498	Kale	P	P	<i>[Signature]</i>
14		Khalre	S	D	<i>[Signature]</i>
15	865206	Ku Khan	A	A	<i>[Signature]</i>
16	865590	Kharkate	S	M	<i>[Signature]</i>
17	865388	Ku Kharvade	S	P	<i>[Signature]</i>
18	865470	Khorgade	A	S	<i>[Signature]</i>
19	865616	Kothari	V	R	<i>[Signature]</i>
20	865247	Kaur	K	B	<i>[Signature]</i>
21	865515	Lende	K	G	<i>[Signature]</i>
22	865523	Masram	L	S	<i>[Signature]</i>
23	865383	Ku Mayur	S	S	<i>[Signature]</i>
24	865354	Ku Mendre	S	D	<i>[Signature]</i>
25	865169	Ku Nihade	A	Y	<i>[Signature]</i>
26	865563	Nikare	J	M	<i>[Signature]</i>
27	865280	Ku Ranpariya	N	J	<i>[Signature]</i>
28	865180	Ku Sharma	A	A	<i>[Signature]</i>
29	865241	Ku Shende	K	B	<i>[Signature]</i>
30	865187	Ku Shukla	A	R	<i>[Signature]</i>
31	865579	Somkuwar	S	D	<i>[Signature]</i>
32	865274	Ku Thakral	N	R	<i>[Signature]</i>
33	865562	Timande	R	A	<i>[Signature]</i>
34		Ku Upadhyay	N	J	<i>[Signature]</i>
35	865388	Ku Wankar	S	S	<i>[Signature]</i>
36	865407	Ku Warmode	S	D	<i>[Signature]</i>
37	865240	Ku Yogoankar	K	P	<i>[Signature]</i>
38	865454	Zade	A	S	<i>[Signature]</i>
39	865459	Zade	A	R	<i>[Signature]</i>

Name of Students	Name	Father Name	Signature of Students
CBG			
Ku Ade	P	S	<i>[Signature]</i>
Ku Ambare	A	P	<i>[Signature]</i>
Ku Bajpai	S	S	<i>[Signature]</i>
Barapatre	P	D	<i>[Signature]</i>
Ku Bhandarkar	N	S	<i>[Signature]</i>
Borkar	S	Y	<i>[Signature]</i>
Fulzele	P	S	<i>[Signature]</i>
Ku Gahalot	R	A	<i>[Signature]</i>
Ku Ganjare	P	A	<i>[Signature]</i>
Hemane	U	S	<i>[Signature]</i>

Department of Botany
Organized Excursion Study Tour
Kullu, Manali Himachal Pradesh
From 6 September 2019 to 23rd September 2019
Session 2019-2020

Feedback

Thank you for participating in the study tour! We would greatly appreciate your feedback to help us improve future tours. Please take a few moments to rate the following aspects of the tour.

1. Organization and Planning

- Excellent
- Good
- Average
- Poor

2. Tour Guides' Knowledge and Expertise

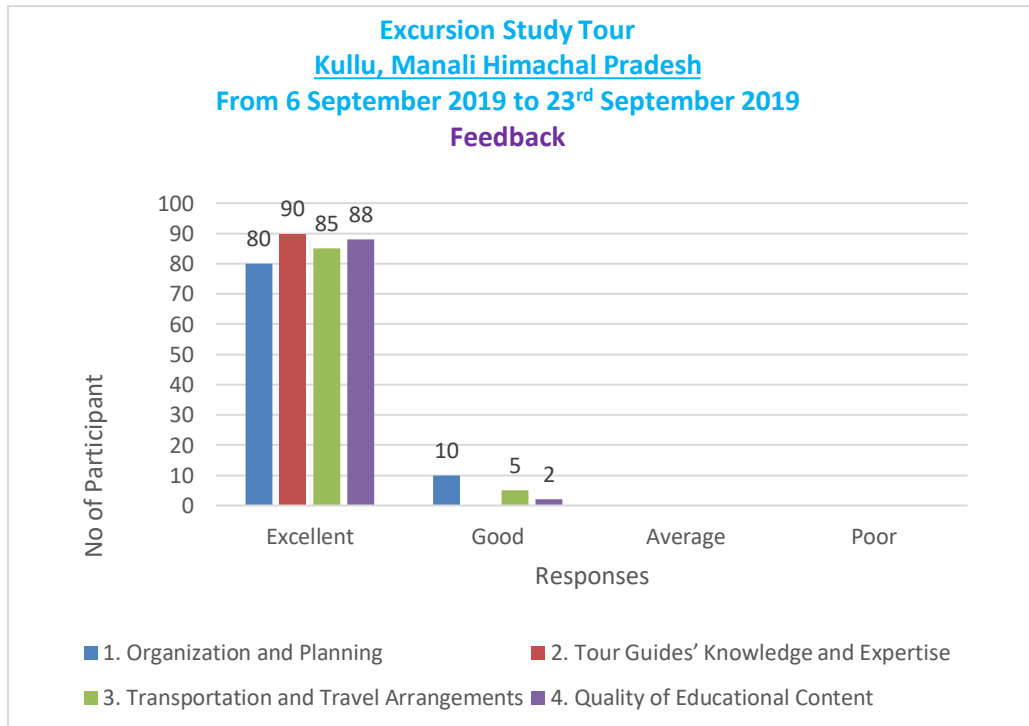
- Excellent
- Good
- Average
- Poor

3. Transportation and Travel Arrangements

- Excellent
- Good
- Average
- Poor

4. Quality of Educational Content

- Excellent
- Good
- Average
- Poor



ACTION TAKEN:

As a part of B.Sc. Curriculum, The Department of Botany at Science College, Congress Nagar, Nagpur, organized an enriching excursion study tour to Kullu and Manali in Himachal Pradesh from September 6, 2019, to September 23, 2019, under the guidance of Dr. R. N. Deshmukh. This educational tour provided students with a unique opportunity to explore the diverse flora and ecological systems of the region. Over the course of the tour, participants engaged in various field studies, collected plant specimens, and conducted ecological assessments, all while being supervised by Dr. Deshmukh. His expertise and leadership ensured that students gained hands-on experience and a deeper understanding of botany and environmental science. The tour significantly enhanced the academic curriculum, offering students invaluable practical knowledge and exposure to real-world ecological environments. Total 2 teaching staff, and 90 students were visited to Kullu, Manali. The major objective was to familiarize the students with the wild and cultivated flora and ecology of the region.