

**MATERIAL
AND
METHODS**

PLATE NO. 1



Map of Maharashtra with Kolhapur district inset



Kolhapur District with Tehsils

For the present study specimens were collected from throughout the district. The selection of localities was based on the climatic and geographic zones. Following are the localities from where the specimens of charophytes were collected.

1. Amboli
2. Gadhinglaj
3. Ichalkaranji
4. Jaisingh Lake, Kagal
5. Kurundwad
6. Kalamba Lake, Kolhapur
7. Rajaram Lake, Kolhapur
8. Malkapur
9. Panhala
10. Rashiwade (budruk)

1. Amboli –

It is a hill station near Sawantwadi. It is a quite but pleasant hill resort. It is 690 meters above sea level and 110 kms away from Kolhapur. The area is surrounded with dense forest. The sea view point offers you panoramic view of a good part of konkan coast. It is 26 kms away from Sawantwadi. There is big marvelous water-fall. Temperature in Amboli is always cool compared to near by hill stations. The location from where *Nitella dualis* was collected is near the origin of Hiranyakeshi river which is 3 kms away from the town.

2. Gadhinglaj –

Gadhinglaj is a city and a municipal council in Kolhapur district. It is a small city in the southern tehsil in the district and touches Karnataka state. It is surrounded by hills along three sides. It is located 623 meters above sea level. It is a well developed city. It is widely noted as 'a great one'. It does not have the glamorous buzz of any industry; nor has it any notable government MIDC area. Even then, the town has its own distinct profile and personality.

As a commercial centre, it has its own identity and popularity. Culturally, politically and educationally it is a very vigilant and alert Taluka place. The worth seeing, charming places in Gadhinglaj region are as; Kalbhairav Temple, Mahalaxmi Temple, Samangarh (The Hillfort), river Hiranyakeshi, Kasturba garden, Tilak garden, Rajarshi Shahu garden etc.

3. Ichalkaranji –

Better known as Manchester of Maharashtra. As it suggests, Ichalkaranji is the hub for textile industry. It is situated on bank of Panchganga river . It is located in the south- east direction of Kolhapur city in Hatkanangle tehsil at a distance of 26 kms. It is a well developed city.

4. Jaisingh Lake, Kagal –

Located at a distance of 20 kms from Kolhapur city, it is a historical place, it is the birth place of Chatrapati Shahu Maharaj, and it is a leading Taluka in Kolhapur District. It is situated 553 meters above sea level. The location of Jaisingh Lake is situated 2 kms prior to the main city. This lake is a very old and is away from human interactions.

5. Kurundwad –

Kurundwad (sometimes spelled Kurandvad or Kurantwad) is a small town on the banks of the Panchganga River in Kolhapur District. It lies in the southern part of Maharashtra. It is a well developed village.

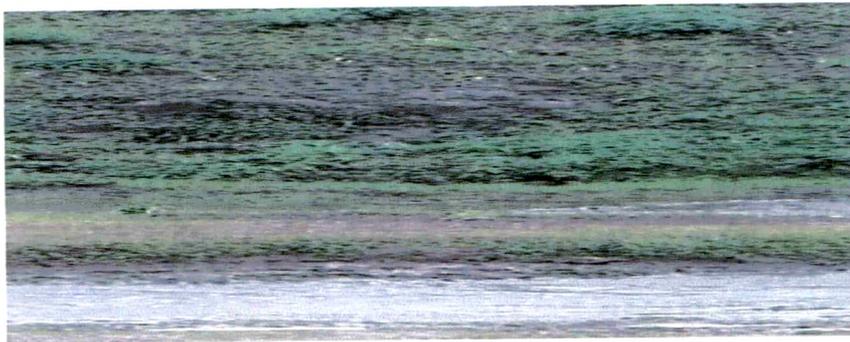
6. Kalamba Lake, Kolhapur

It is located in the village called Kalamba. It is one of the oldest lakes in Kolhapur city. It is located on the Kolhapur – Gargoti Road. It is 5 kms away from the center of the city. It is a famous location for bird watching that travel a great distance every year for breeding.

PLATE NO. 2



A1. Origin of Hiranyakeshi River: Amboli



A2. Collection site of Charophytes: Amboli



A3. Collection site of Charophytes: Amboli

PLATE NO. 3



B. Collection site of Charophytes: Gadhinglaj



C. Collection site of Charophytes: Ichalkaranji



D. Collection site of Charophytes: Jaisingh Lake, Kagal

PLATE NO. 4



E. Collection site of Charophytes: Kurundwad



F. Collection site of Charophytes: Kalamba Lake, Kolhapur



G. Collection site of Charophytes: Rajaram Lake, Kolhapur

7. Rajaram Lake, Kolhapur –

It is located near Sarnobat wadi near Shivaji University. It is also one of the oldest Lake in Kolhapur city. It was used for supplying water for drinking and irrigation purpose for the people of nearby villages. It possess a good panoramic view as it is located along a small hill and is a good tourist spot.

8. Malkapur –

Malkapur is a city and a municipal council in Kolhapur district. It is located in North - West direction of the city. Malkapur is somewhat located in Konkan region of Maharashtra state. It is a good area for any botanist to explore because of the greenery and a good dense forest present around the tehsil.

9. Panhala –

Panhala is a scenic hill station (3177 feet above sea level) 20 km northwest of Kolhapur city. Panhala commands a panoramic view of the valley below. The main historical attraction here is the Panhala fort. There are many places of interest, each with its share of haunting anecdotes. The history of Panhala is closely linked with the history of the Maratha Empire, and with its founder, Shivaji. Panhala is the only fort where Shivaji spent more than 500 days, other than his childhood homes. It was Maratha State capital until 1782 and in 1827 it became part of the British Empire.

10. Rashiwade (budruk) –

It is located south west and 28 kms away from Kolhapur city in Radhanagri tehsil. It is the only major village in Radhanagri tehsil. It is rich in natural vegetation and. It is blessed by may tree plantation programs under taken by Govt of Maharashtra.

During collection specimens were observed thoroughly for their morphological characters in the field. The specimens were brought to the laboratory

and preserved in 4 % formaldehyde solution for further use. Identification of specimens was made using Wood and Imahori (1965), Pal et al (1962), Groves Webster (1910), and Zaneveld (1940).

PLATE NO. 5



H. Collection site of Charophytes: Rajaram Lake, Kolhapur



I. Collection site of Charophytes: Malkapur



J. Collection site of Charophyte: Panhala Fort

PLATE NO. 6



K. Collection site of Charophytes: Panhala Fort



L. Collection site of Charophytes: Rashiwde