

MEDICINAL PLANTS OF KHAPARA VILLAGE WETLAND AND ITS ENVIRONS AMIRGADH TALUKA (N. G.) INDIA

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Abstract:

Wetlands are one of the most the crucial natural resources. Wetlands are areas of land that are either temporarily or permanently covered by water. This means that wetland is neither truly aquatic nor terrestrial. This work had been carried out on Khapara village pond during December 2018 to March 2019. During this work 43 plant species were recorded, 20 families having 39 genera were observed. Belonging to 20 Angiosperm families were recorded from the wetlands of Khapara village.

Key words: Aquatic plants, Khapara village

Introduction:

Normally, wetlands are classified in two categories Inland wetland and Coastal wetlands. Inland wetland is the state includes freshwater lakes, village ponds, sim talab, reservoirs (Talab/Sinchai Talab) marshes, paddy fields, dams, canals, river, and streams. Coastal wetlands include saltwater marshes, estuaries, mangroves, and coral reefs.

Wetlands are a critical part of our natural environment. They protect our shores from wave action, reduce the impacts of floods, absorb pollutants, and improve air quality. They provide habitat for animals and plants and many contain a wide diversity

of life, supporting plant and animals. Wetlands provide an important range of environmental, social, and economic services. Many wetlands are areas of great natural beauty and many are important to people. Wetlands are estimated to occupy nearly 6.4% of the earth surface. The nationwide wetland inventory data reveals that there are 7.6 million ha of wetland units in the country of which 4.0 million ha are coastal wetland and 3.6 million ha are inland wetland, which is around 4.63% of the geographic area of the country. Wetlands of Gujarat were cover approximately 17.56% of geographical area of the state. Gujarat constitutes almost all types of inland and coastal wetland

including freshwater lake, village pond/ talab, mangroves, coral reefs, mudflats etc.

Wetland is among the most productive ecosystem in the world (Mitsch & Gosselink 1993). In India the first comprehensive work on the wetland flora was produced (Biswas & Calder 1984). Several works have been done on different freshwater bodies of India, (Kar & Barbhaiya 2007, Kauramb 2007, Dabgar 2006, Dabgar and Jain 2006, Prusty and Azeez 2008 and Gupta 1996).

The area Khapara is unexploited for this type of works so I select this area. The present study deals with a floristic survey on the wetland plants also add taxonomical Character of Plants.

Study Area:

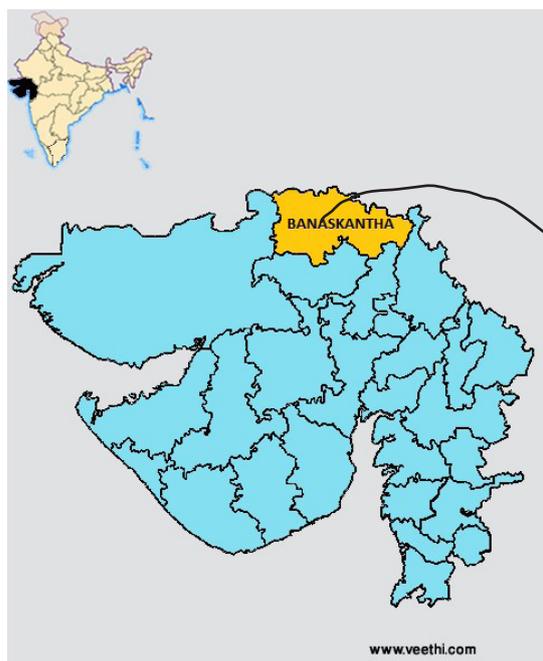
Khapara village is the part of the Amirgadh taluka in Banaskantha district. Banaskantha is in the north east of the

state. The district gets its name from the west Banas River which runs through valley between Mountabu & AravliRang. Banaskantha cover an area of 10,757sq.km. Khapara village near to Palanpur 40km. the geological location is 24.2336°N, 72.7186°E.

The present study is on wetland of Khapara village. The pond at presents the cover area is nearly about 4 hectares. The temperature in the Khapara village increases after February. March and April are generally the hot month of the year. The humidity rate is comparatively high in the Amirgadh taluka throughout the year.



The Average rainfall in Khapara village is 790mm.



Methodology:

The present work is done on wetland of Khapara village and environs of this wetland. Present work is the outcome of 4-month intensive survey from December 2018 to March 2019 with perilous examination.

In addition, species were documented by simple survey method to make a checklist of plant of this wetland. Moreover, this survey was attempted to categorize aquatic vegetation into Marshy, emergent, submerged, free floating hydrophytes.

Nomenclature of the plant species are used in this work on based available floras “flora of Gujarat state” (Shah 1978).

Each plant has been arranged or classified by Bentham and Hooker’s System of Classification and taxonomical character of plant is included in this work.

Result

A total of 43 plant species were recorded, from 20 families having 39 genera were observed. among them, a total of 17 families belong to the class Dicotyledons and a total of 3 families belong to the class Monocotyledon. The dominants families are Fabaceae with 7 species followed by Asteraceae 5, Amaranthaceae 4, Solanaceae 4, Convolvulaceae 3, Hydrocharitaceae 2, Euphorbiaceae 2, Menispermaceae 2, Verbinaceae 2, Lamiaceae 2 and Moraceae 2, and the rest families were represented by monospecies.

Out of 43 species 4 species are aquatic, 15 species are grown in moist soil, 24 species are grown-up wetland around 100-200 meter.

Families with several species and genera were given in table no.-2

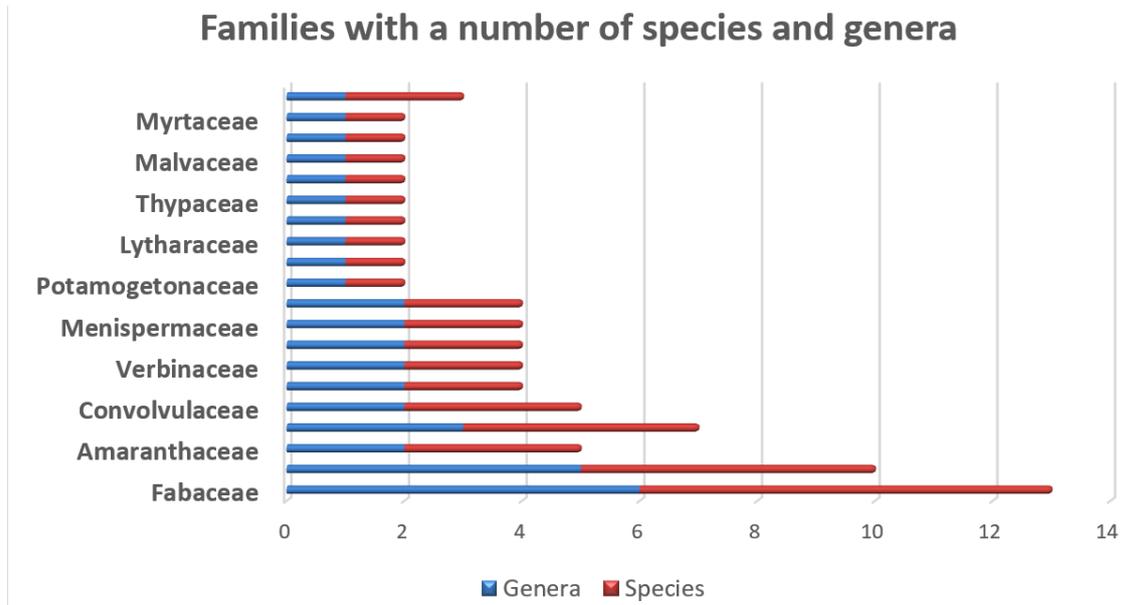
Sr.	Scientific Name	Local Name	Family	Use
1.	<i>Abrus precatorius</i> L.	Chanothi	Fabaceae	• Sores and wound
2.	<i>Alternanthera denticulata</i> L.	Bhaji	Amaranthaceae	• Hepatitis, bronchitis, asthma and lung troubles
3.	<i>Alternanthera sessilis</i> (L)R.Br. exDc	Aganboti	Amaranthaceae	• Hepatitis, bronchitis, asthma
4.	<i>Ammania baccifera</i> L.	Aganboti	Lytharaceae	• wounds & swellings
5.	<i>Argemone mexicana</i> L.	Darudi	Papavaraceae	• Tumor, warts, skin diseases
6.	<i>Bacopa monnieri</i> (L) Pennell	Kadvi luni	Scrophulariaceae	• To promote memory, intelligence and concentration

7.	<i>Butea monosperma</i> (Lam) Taub	Kesudo, palas	Fabaceae	<ul style="list-style-type: none"> Parasitic infections, urinary diseases, and diabetes
8.	<i>Capparis decidua</i> (Forssk) Edgew	Kerdo	Capparaceae	<ul style="list-style-type: none"> Toothache, arthritis, asthma, cough, malaria and swelling
9.	<i>Cassia auriculata</i> L.	Aval	Fabaceae	<ul style="list-style-type: none"> Diabetes, asthma, rheumatism, dysentery, skin diseases
10.	<i>Cassia tora</i> L.	Kuvadiyo	Fabaceae	<ul style="list-style-type: none"> Leprosy, ringworm
11.	<i>Chrozophora prostrata</i> Dalz.		Euphorbiaceae	<ul style="list-style-type: none"> Skin burns, diarrhea, jaundice, mouth ulcer, joint pain and swelling.
12.	<i>Cocculus hirsutus</i> (L) Diels	Vevdi	Menispermaceae	<ul style="list-style-type: none"> Fever, skin diseases, stomach disorders, urinary diseases
13.	<i>Cuscuta reflexa</i> Roxb.	Amervel	Convolvulaceae	<ul style="list-style-type: none"> diabetes mellitus
14.	<i>Datura stramonium</i> L.	Datura	Solanaceae	<ul style="list-style-type: none"> Toothache, and fever
15.	<i>Digeria muricata</i> (L) Mart	Kanjro	Amaranthaceae	<ul style="list-style-type: none"> kidney stones in the urinary tract, constipation, diabetes
16.	<i>Eclipta prostrata</i> L.	Bhangro	Asteraceae	<ul style="list-style-type: none"> Treat snakebite
17.	<i>Eucllyptus globulus</i> Labill	Nilgiri	Myrtaceae	<ul style="list-style-type: none"> Cough and cold
18.	<i>Euphorbia hirta</i> L.	Vadi Dudheli	Euphorbiaceae	<ul style="list-style-type: none"> Cough, coryza, bronchitis, asthma
19.	<i>Ficus benghalensis</i> L.	Vad	Moraceae	<ul style="list-style-type: none"> wounds, skin diseases, eye diseases, diabetes
20.	<i>Ficus glomerata</i> Roxb.	Umro	Moraceae	<ul style="list-style-type: none"> spongy gums, ulcers, diabetes, asthma,
21.	<i>Hydrilla verticillate</i> (L.F) Royle	Bam, Hydrilla	Hydrocharitaceae	<ul style="list-style-type: none"> Improve blood circulation
22.	<i>Ipomoea aquatic</i> Forssk	Nali Ni Bhaji	Convolvulaceae	<ul style="list-style-type: none"> high blood pressure & Jaundice
23.	<i>Ipomoea fistolosa</i> L.	Naffat vel	Convolvulaceae	<ul style="list-style-type: none"> diabetes, bronchitis,
24.	<i>Lantana camara</i> L.	Indradhanu	Verbenaceae	<ul style="list-style-type: none"> Cancer, skin itches, leprosy, chicken pox, measles, asthma, and ulcers.

25.	<i>Launaea procumbens</i> (Roxb.) Ramayya & Rajagopal	Bhoi panthri	Asteraceae	• Eye redness and itchiness
26.	<i>Leucas aspera</i> (Wild.)Spr	Kubo	Lamiaceae	• Headache, asthma, and bronchitis.
27.	<i>Mucuna pruriens</i> (L) DC	Kowatch	Fabaceae	• Nervous disorders, and aphrodisiac.
28.	<i>Ocimum basilicum</i> L.	Damro	Lamiaceae	• headaches, coughs, diarrhea, constipation, warts, and worms
29.	<i>Phyla nodiflora</i> (L.) Greene	Ratvelio, Ratulio, Ratokharar	Verbenaceae	• Hepatitis and dermatitis
30.	<i>Physalis minima</i> L	Popti	Solanaceae	• Used anti-cancerous, antidiabetic, anti-inflammatory
31.	<i>Polygonum glabrum</i> wild		Polygonaceae	• Pneumonia, consumption, jaundice, fever
32.	<i>Potamogeton crispus</i> L.		Potamogetonaceae	• dyspepsia and piles
33.	<i>Senegulia catechu</i> (L.F.) P.J.H Hurter &Mabb.	Khair	Fabaceae	• Diarrhea, swelling of the colon (colitis)
34.	<i>Sida cord folia</i> L.	Bala	Malvaceae	• Asthma, tuberculosis, colds, flu.
35.	<i>Solanum nigrum</i> L.	Piludi	Solanaceae	• Bacterial infection, cough, indigestion
36.	<i>Solanum surattense</i> Burm f.	Bhoi ringni	Solanaceae	• Fever, cough, asthma and diabetes
37.	<i>Sphaeranthus indicus</i> L.	Gorakh mundi	Asteraceae	• Mental illness, Jaundice, Fever, Cough and skin diseases
38.	<i>Tephrosia purpurea</i> (L)Pers	Sarpankho	Fabaceae	• Leprosy, ulcers, asthma, and tumors,
39.	<i>Thypha latifolia</i> L.	Gha Bajariu	Thyphaceae	• Sores.
40.	<i>Tinospora cordifolia</i> (wild.) Miers	Galo	Menispermaceae	• Fever, jaundice, chronic diarrhea, cancer, asthma, skin disease
41.	<i>Tridax procumbens</i> L.	Pardeshi Bhangro	Asteraceae	• Diarrhea, dysentery and liver diseases.

42.	Vallisneria spirallis L.	Jal sevar, sewar	Hydrocharitaceae	• Treat in Leucorrhea
43.	Xanthium strumarium L.	Gadariyu	Asteraceae	• Rhinitis, nasal sinusitis, headache, gastric ulcer, Fungal infection

Table 2:



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