

STUDY OF SOME ETHNOMEDICINAL PLANTS IN PAINGANGA FOREST REGION

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Abstract:

Painganga forest is abundant in therapeutic herbs. The forest's indigenous residents have a strong belief in the therapeutic properties of the plants. The tribal peoples and forest rustics rely entirely or partially on the therapeutic plants found in the area due to the poor state of contemporary healthcare services and poverty. The goal of the current study was to investigate traditional medical knowledge from vendors, tribal members, rustics, traditional healers, and medical practitioners. According to this study, the local villagers use 37 medicinal plants from 28 distinct families to treat and prevent a variety of illnesses.

Keywords: Medicinal Plants, Tribals, Disease, Forest.

INTRODUCTION:

Among the Angiospermic plants, 420,000 flowering plants were reported from the world (Govaerts, 2001) and many tropical species are not yet named. More than 50,000 plants have been used for medicinal purposes (Schippmann et al., 2002). Ethnobotany can be defined as the total natural and traditional relationship and interactions between man and his surrounding local environment (Martin 2001). The plants which naturally contain certain phytochemical constituents having remedial properties are called medicinal plants. The world health organization (WHO, 2003) has estimated that 80% of the population of developing countries being unable to afford pharmaceutical drugs they relies on plant based traditional medicines to sustain their primary health care needs. India is one of the most medico-culturally diverse country in the world where the medicinal plant sector is honored tradition, that is respected even today. The main traditional systems of medicine include Ayurveda, Unani and Sidha (Bopana and Saxena, 2007). The use of plants as medicine is found in the Rigveda which was written between 4500 and 1600 BC (Balakrishnan et al., 2009). The Painganga forest is present in eastern region of Maharashtra state in Yavatmal district of Vidarbha region. Geographically it is located between 19° 36' to 19° 7' North latitudes and 77° 42' to 77° 7' East longitudes. The total Painganga forest area in Umardhed tehsil is 487 sq/km. which is 39.33% of the geographical area of the tehsil. This region is rich in diverse flora and suitable for ethnobotanical exploration. Therefore, it is urgent to explore and document this unique and indigenous, traditional knowledge of the tribal community, before it diminishes with the knowledgeable persons. Keeping in mind, the importance of medicinal plants and their medicinal properties among local people, the present study was carried out to study Ethnobotany of Painganga forest, district Yavatmal.

METHODOLOGY:

The study was conducted in the Painganga forest, which is located in the Yavatmal district of Maharashtra's Umardhed tehsil. Numerous periodic surveys were carried out in the Painganga forest between 2016 and 2018 in a variety of locations, communities, and tribal hamlets as part of this study. The knowledge regarding the therapeutic applications of plants was gathered from practitioners, tribe members, rural residents, traditional healers, and vaidyas. Experts in taxonomy from the department of botany at Gopikabai Sitaram Gawande Mahavidyalaya, Umardhed, District Yavatmal, Maharashtra, taxonomized the collected plant specimens using floras. The plant name, family, local name, and folk use were tabulated in the data. (Bhogaokar and Kadam, 2006; Kanthale and Biradar, 2010).

Identification:

The plants were identified taxonomically by using standard floras (Naik, (1979); Naik et al., (1998) and Yadav and Sirdesai (2002).

Table 1: Some important ethnobotanical uses of Painganga forest.

Sr. No.	Botanical Name	Local/Vernacular Name	Family	Parts used	Medicinal Uses
1	<i>Adhatoda vasica</i> Ness.	Adulsa	Acanthaceae	Leaf	Expectorant, antiplasmodic
2	<i>Peristrophe paniculata</i> (Forssk.) Burm. f.	Bhuilimb	Acanthaceae	Leaf	Fever, abdominal pain
3	<i>Achyranthes aspera</i> L.	Aghada	Amaranthaceae	Leaf	Wound healing
4	<i>Buchanania lanzan</i> Spreng	Charoli	Anacardiaceae	Bark, seed	Tonic, typhoid
5	<i>Semecarpus anacardium</i> L.	Kokadi or biba	Anacardiaceae	Fruit	Wound healing
6	<i>Annona squamosa</i> L.	Sitaphal	Annonaceae	Leaf	Wound healing, vomiting
7	<i>Vinca rosea</i> L.	Jagannathi or sadafuli	Apocynaceae	Roots	diarrhea
8	<i>Calotropis gigantea</i> (Linn.) R.Br.	Ruchki	Asclepiadaceae	Leaf	Headache
9	<i>Ceropegia bulbosa</i> Roxb.	Hanuman gadda	Asclepiadaceae	Tubers	Energetic tonic, Weakness,
10	<i>Tridax procumbens</i> L.	Kambarmodi, kolsan	Asteraceae	Leaf	Antiseptic, wound healing
11	<i>Xanthium strumarium</i> L.	Landga	Asteraceae	Leaf	Cephalalgia, malarial fever
12	<i>Balanites aegyptiaca</i> (Linn.) Del.	Hinganbet	Balanitaceae	Fruit, seed	Cataract, cough
13	<i>Bauhinia variegata</i> L.	Apta or Kanchan	Caesalpinaceae	Leaf, stem bark	Weakness, malaria
14	<i>Cassia fistula</i> L.	Bahava	Caesalpinaceae	Root	Snake bite
15	<i>Cleome gynandra</i> L.	Tilwan	Capparidaceae	Leaf	Vomiting, diarrhoea.
16	<i>Dioscorea bulbifera</i> L.	Jata Shankar	Discoraceae	Rhizome	To increase lactation
17	<i>Abrus precatorius</i> L.	Gunj	Fabaceae	seed	Leucorrhoea.
18	<i>Albizia lebbek</i> (L.) Benth.	Kala shirish	Fabaceae	Bark	Piles
19	<i>Indigofera tinctoria</i> L.	Neel	Fabaceae	Flowers	Skin burn
20	<i>Rhynchosia minima</i> (Linn.) DC.	Pivli pushpin	Fabaceae	Plant juice	Chronic fever
21	<i>Enicostema axillare</i> (Lam.) Raynal	Nayta or nai	Gentianaceae	Plant powder, roots	Kidney stone, snake bite
22	<i>Asparagus racemosus</i> Willd.	Shatavari	Liliaceae	Root	White discharge
23	<i>Ammannia multiflora</i> Roxb.	Mungni	Lythraceae	Plant powder	Head itching
24	<i>Abelmoschus manihot</i> (L.) Medik.	Ran bhendi	Malvaceae	Seed powder	Abdominal pain, gastric problems
25	<i>Tinospora cordifolia</i> (Wild.) Hook.f. and Thoms.	Gulwel	Menispermaceae	Stem	Diabetes
26	<i>Ficus benghalensis</i> L.	Wad	Moraceae	Latex	Pimples
27	<i>Boerhavia repens</i> L.	Punarnava	Nyctaginaceae	Leaf	Hepatitis
28	<i>Argemone mexicana</i> L.	Bilayati	Papaveraceae	Leaf, root	Indigestion, cataract.
29	<i>Morinda pubescens</i> J. E. Sm	Bartondi	Rubiaceae	Bark	Jaundice and typhoid.
30	<i>Limonia acidissima</i> L.	Kauth	Rutaceae	Leaf	Jaundice.
31	<i>Cardiospermum helicacabum</i> L.	Kapalphuti	Sapindaceae	Root bark	Asthma
32	<i>Helicteres isora</i> Linn.	Murad sheng	Sterculiaceae	Pods	Fits
33	<i>Tacca leontopetaloides</i> L.	Penghagara or Jatashankar	Taccaceae	Tuber	Cellulites, stomach pain, psychiatric problems.
34	<i>Tectona grandis</i> Linn.f.	Sag or sagwan	Verbenaceae	Fruit	Kidney stone
35	<i>Vites negundo</i> L.	Nirgundi	Verbenaceae	Leaf	Anti-inflammatory, analgesic.
36	<i>Cissus quadrangularis</i> L.	Hadjodi	Vitaceae	Leaf	Bone fracture
37	<i>Curcuma pseudomontana</i> Grah. Cat.	Ran halad	Zingiberaceae	Rhizome	Hepatitis

RESULTS AND DISCUSSION:

According to the current study, the indigenous tribal people and villagers living in the Painganga forest used 37 species of ethnobotanically significant plants that belonged to 28 families. These herbs are frequently utilised for therapeutic purposes. These significant medicinal plants were used to treat a wide range of illnesses, including indigestion, skin conditions, diarrhoea, coughing, dysentery, and chronic fever. They were also employed as a snake bite remedy and to heal wounds. These plants were used to make a variety of preparations, such as juice, leaf extract, root extract, decoction, paste, latex, and powdered plant parts. A few plants were employed in the various preparations. Local and traditional healers mostly use the leaves and roots of these medicinal plant concoctions to treat illnesses. External use of plant concoctions derived from many medicinal plants is employed to treat ailments such as wounds, skin conditions, rheumatism, and bites from snakes and scorpions. Oral ingestion was advised as a preventative measure against illnesses like as fever, dyspepsia, colds, diarrhoea, etc. People with different disorders are prescribed drugs either alone or in combination with other plants or plant parts. This wealth of medicinal plant knowledge is invaluable to academics studying ethnobotany and ethnopharmacology. The examination of the current study reveals that the local population's traditional knowledge of medicinal plants is very important to them. Finally, to conclude, this research article will attract the attention of ethno botanists, phytochemists and pharmacologists for further critical investigation of medicinal plants present in the region of Maharashtra, India.

CONCLUSION:

The field study reveals that although the local population still relies on plant resources to treat a variety of illnesses, this dependence is waning. This is most likely because, although documented uses of plants as medicine exist, the rural and tribal people are vocally familiar with them. Local traditional healers and senior medicine men have become quite scarce in modern times. The amount of traditional knowledge held by the tribal people in this area is dwindling due to a lack of interest among newer generations and their propensity to relocate into cities in search of well-paid work. Since there hasn't been much research done on ethnobotany in the area, this study could contribute to our understanding of traditional medicine. Now the time has come to compile and document traditional knowledge and medicinal potential of such herbal plants. The pharmacognostic studies should be taken up for the confirmation of ethnomedicinal claims and also provides a lead in the development of drugs to be used in the modern system of medicine. The Painganga forest and its vegetation is very important in phyto medicine. The natural plant resources of Painganga forest are very fastly disappearing; the public should be made aware of the importance of protecting the natural resources of this region.

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