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**ETHNOMEDICINAL SURVEY OF *TUBIFLORA ACAULIS* (L. F.) KUNTZE FOR
TREATMENT IN TRIBES OF SATPUDA RANGES OF NANDURBAR DISTRICT,
MAHARASHTRA**

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ABSTRACT

Herbal medicines have been widely utilized as effective remedies for the prevention and treatment of multiple health conditions for centuries by almost every known culture. Traditional healers provide considerable information about the use of many plants or plant parts as medicine. Plant drugs have been the major source for treatment of diseases for a long time. They have been used in traditional medicine on the basis of experiences and practice. Ethnomedicinal survey was carried out to collect information about medicinal plants used by tribes in Satpura Ranges of Akkalkuwa, Jamana, Amblibari, Dhadgaon in Nandurbar District and the investigation reveals that the tribal's people used the *Tubiflora acaulis* kuntze for treatment of Kidney stone, urinary complains, fever, inflammation, Gastrointestinal disorder, cough etc. But due to scarcity about information on ethnomedicinal uses and their claims of this plant from tribes of Satpuda region, hence it is necessary to need for investigations of these important disappearing plants to strengthen the documentation of ethnic drugs and developing novel drug to treat chronic diseases.

Keywords: *Tubiflora acaulis*, ethnomedicinal, Satpuda, Akkalkuwa, Nandurbar

INTRODUCTION

Plants have always been a major component of traditional system of healing in developing countries, which have also been an integral part of their history and culture. Medicinal plants offer alternative remedies with tremendous opportunities.

India has rich medical heritage with a large number of traditional practices, systems and medicines as a part of its total health care scenario, some of them are more than 3,000 years old. In spite of remarkable achievements of modern medicines and research, these ancient systems continue to play a major role in the control or alleviation of diseases [1]. Herbal medicines have been widely utilized as effective remedies for the prevention and treatment of multiple health conditions for centuries by almost every known culture. In India, the main traditional systems of medicine include Ayurveda, Unani and Siddha use over 8000 plant species have been reported. Traditional healers provide considerable information about the use of many plants or plant parts as medicine.

The term ethnoecology has in recent years received considerable emphasis in international literature. With this term, we refer to studies that describe local peoples' interactions with the natural environment.

Ethnobotany is the part of ethnoecology that concerns plants and has been defined by Balick and Cox (1996) as “the study of the relationships between plants and people” ethno refers to the study of people, botany the study of plants. Ethnobotany is therefore the study of the knowledge, skills, and daily uses of plants in a particular area that enable the people of the local community to get the most out of their natural environment [2].

PLANT PROFILE



Figure 1: *Tubiflora acaulis* Kuntze (Acanthaceae) Plant

1. Taxonomy [3]

Kingdom- Plantae

Phylum- Tracheophyta

Class- Magnoliopsida

Order- Scrophulariales

Family- Acanthaceae

Genus- *Tubiflora*

Species- *Tubiflora acaulis*

Scientific name- *Tubiflora acaulis*

2. Common names [4, 5]

Marathi : Vismuli, Burandya

Hindi : Patharchatta

Tamil : Pumikatampam

Telugu : Yeddadugu

Synonym-

Elytraria acaulis

3. Description:

Stemless perennial herb with 1-several unbranched flowering stems with a short creeping sometimes branched rootstock, up to 30 cm tall. Leaves in a basal rosette, subsessile, elliptic to obovate, up to 18 cm long, hairy, particularly on the veins below; margin subentire to scalloped in the upper part. Flowers in 1-several spikes held in tight apiculate, overlapping bracts. Bracts and flowering stem bluish green. Corolla white, lower lip and lateral lobes spreading, 2-lobed. Flowers often not opening. Capsule 5.5-6.5 mm long, hairless [5].

4. Distribution:

It is found all over the Satpuda region and shady habitats in Nandurbar district it is also found in Angola, Botswana, Congo, the Democratic Republic of the Ghana, India, Malawi, Nigeria [5].

5. Traditional Uses:

- Leaf powder with water is given for urinary complains [6].

- The whole plant is internally and as well as externally used in the case of deworming by traditional users in Villupuram district of Tamil Nadu, India [7].
- Leaf powder with water for treatment of Kidney stone and Urinary tract troubles in Aravali regions of Rajasthan [8].
- Decoction of root is mixed in equal amount of local liquor and one cup of this mixture is taken daily for 3- 4 days in the morning for easy expulsion of guinea worm. Half teaspoon root extract is given to children once a day for two days for asthma by tribal's of Southern Rajasthan [9].
- Leaf extract is taken orally during first 2- 3 days of menses in dysmenorrhoea. During treatment, oil and acidic diet is strictly prohibited. Leaf powder is taken with water to remove kidney stone by tribals of Rajasthan [10].

MATERIALS AND METHODS

Plant Material

The Plant *Tubiflora acaulis* Kuntze (Acanthaceae) was collected from Satpuda hills, Akkalkuwa, Dist: Nandurbar, Maharashtra, India. The plant authenticated by Dr. Priyanka A. Ingale, Scientist B, Botanical Survey of India, Pune (Voucher Specimen number-01). By comparing

morphological features and a sample voucher specimen of the plant was deposited for future reference.

Location and study area

Nandurbar district extends between 21° 0' to 22° 03' north latitude and 73° 47' to 74° 47' east longitude Nandurbar district lies in the north western part of Maharashtra Nandurbar district was created with bifurcation of Dhule district on 1 st July 1998, The region is bounded by Dhule district on east and south while on the west by Surat District of Gujarat state and an the north by Badwani and Jhabua District of Madhya Pradesh state [11].

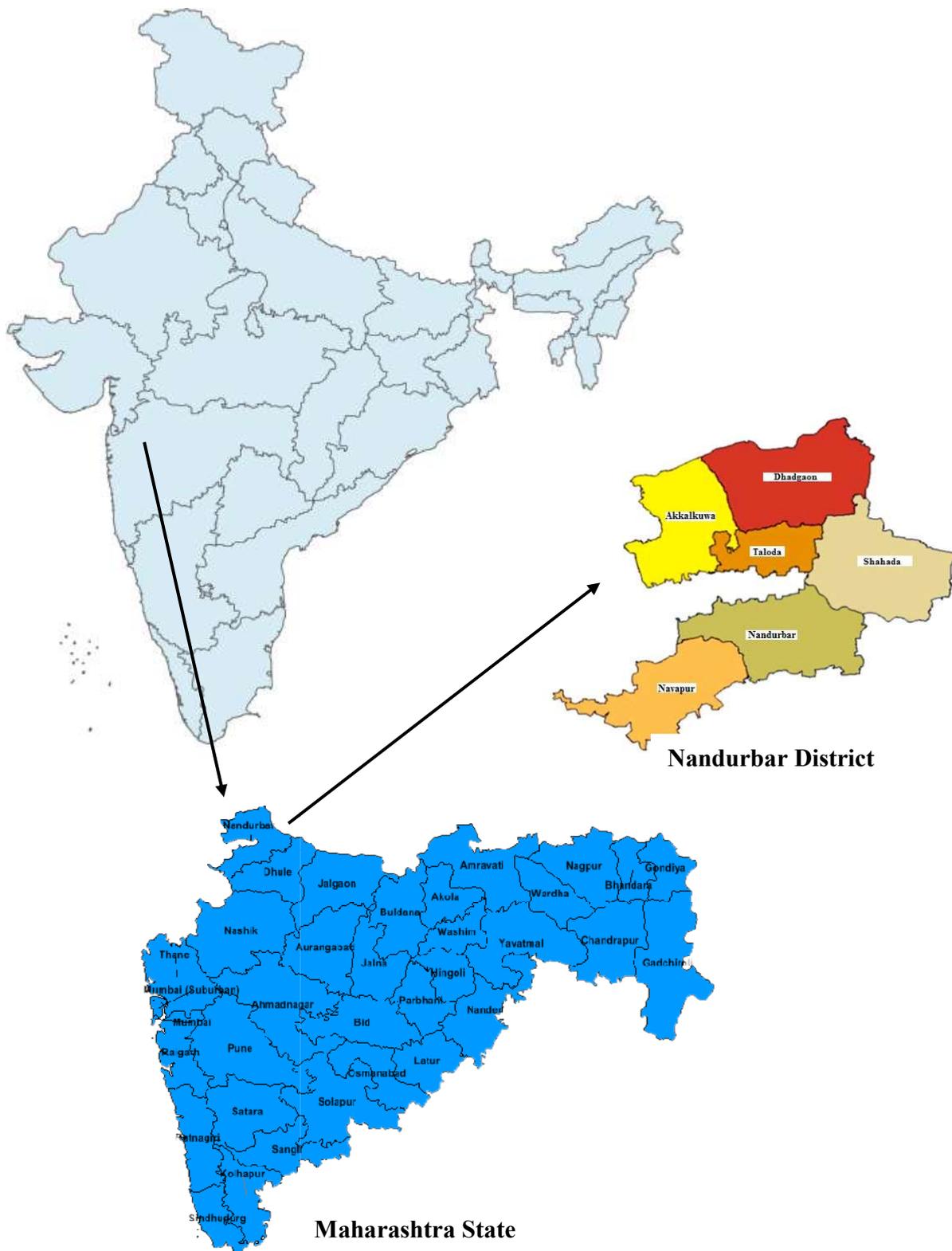
Pawra tribe

The tribes continue to receive scant attention from their social as well as population geography. The hills, ravines, forest, rains all contribute to preservation of their culture. These aspects are found among the tribes of Gond, Bhil, Pawra Living in specific areas Pawra tribe hare their own identity and their own life style. The pawra tribe is mostly inhabited in the ranges of sutpura mountain In Nandurbar district pawara tribes majorly in Dhadgaon Tahasil in Nandurbar district. The

entire Dhadgaon Tahsil is situated in the satpura ranges. Secondly in these Tahasil 94.95 % populations is tribal populations thirdly the pawras primitive identity is still found there. Even though in this area most of the pawras are unknown with other languages of their neighboring people except educated pawras [11].

Ethnomedicinal Information

Field investigations were conducted in several villages of the study area in Satpuda region of Akkalkuwa, Jamana, Amblibari, Dhadgaon etc. in Nandurbar District. The ethnobotanical data were collected from 100 peoples using semi questionnaire, interviews and discussions in their local dialect with the herbal practitioners, old men and women including young settlers in the community. Questions on Ethnomedicines inquired on modes of preparation (powder, boiled, etc.), administration (oral or dermal), uses plants, ease of intake and parts of plants. All the data collected were organized through Microsoft Excel [12]. The details Demographic Data of the informants and traditional uses of plant shown in **Table 1, 2** and in **Graph No 1**.



RESULTS AND DISCUSSION

During present survey investigation an attempt has been made to explore the treasure trove of traditional medicinal plants used for curing various ailments. The survey study reveals with principal aim of such study is to make sure that local natural history becomes a living tradition in communities; it is being transmitted orally from time to time. The result of this work can later be applied to biodiversity, conservation and community development with this conclusion that the tribal of Satpuda Nandurbar District has the knowledge regarding ethnomedicinal uses of this *Tubiflora acaulis* kuntze plant and there

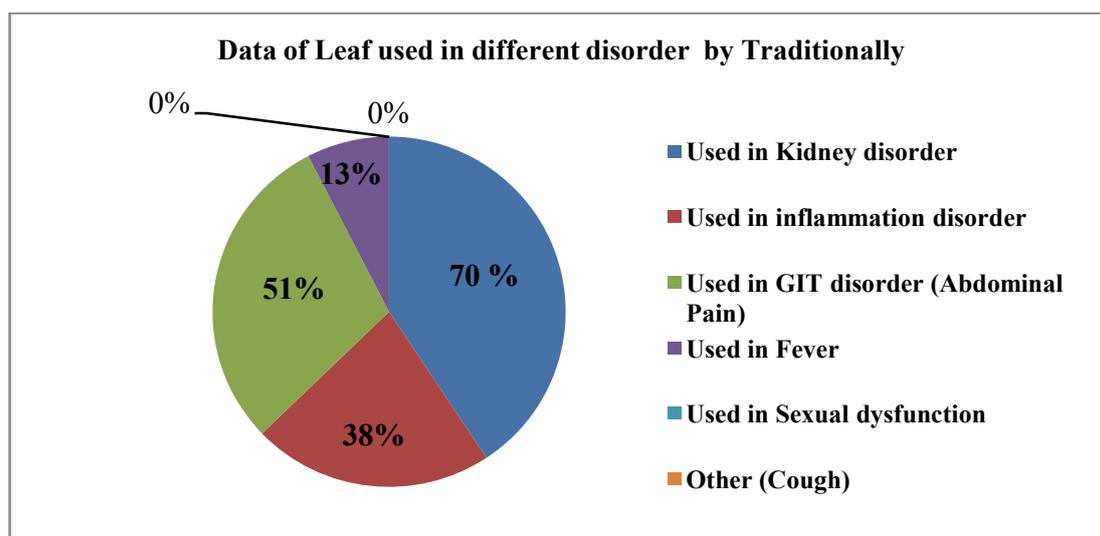
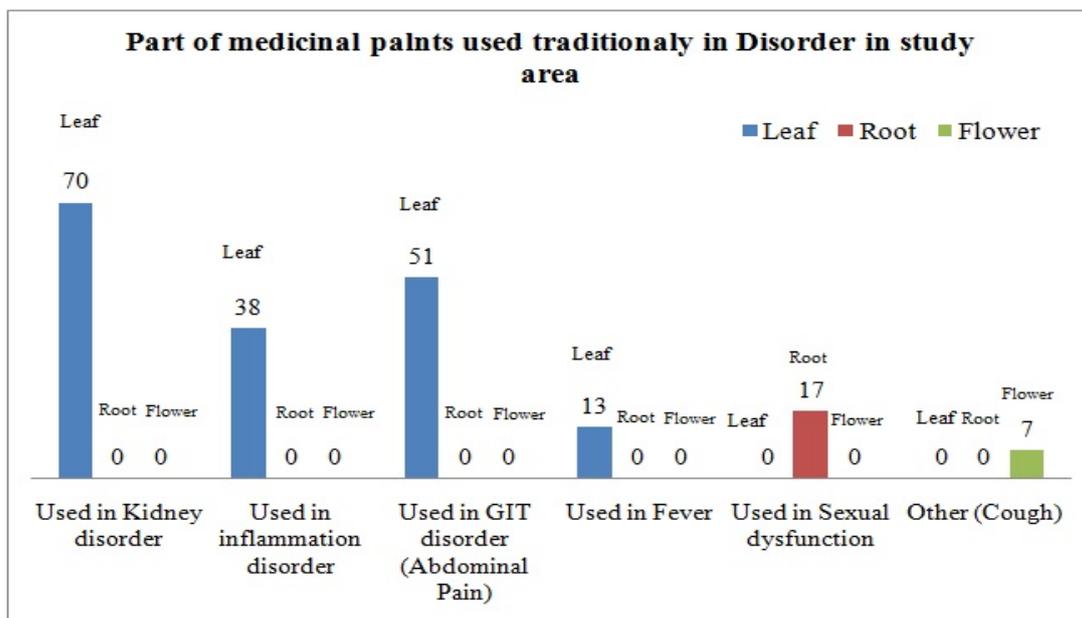
utilization in various simple to critical diseases like kidney stone, fever, cough, fever, Inflammation, Gastrointestinal disorder etc. With the promising ethnomedicinal survey of this plant of Satpuda region are interested and provide new medicinal plant for further ethno-pharmacological investigation on *Tubiflora acaulis* plant. Such a species may be utilizes in the formation of new drugs after confirmation of their therapeutic efficacy against different ailments immediate attention and conservation so that these could be source of revenue generation amongst the local people of this region.

Table 1: Demographic Data of the informants

Variable	Categories	No. of person
Gender	Male	82
	Female	18
Age	30 & Less than 30	15
	31-40	19
	41-50	23
	51-60	29
	More than 0	14
Educational background	Illiterate	41
	Complete 5 yr education	18
	Complete 8 yr education	14
	Complete 10 yr education	11
	Complete 12 yr education	7
	Graduate	5
Experience	Other	4
	Less than 2 year	12
	2-5 years	21
	6-10 years	32
	11-20 years	21
Profession	More than 21	14
	Ayurvedic	3
	Hakim	8
	Unani	57
	Local older person	13
	Others	19

Table 2: Parts of medicinal plants used in different disorder and treatment by traditionally in the study area

Plant Part	Percentage (%) of the parts of medicinal plants used in different disorder and treatment by traditionally					
	Used in Kidney disorder	Used in inflammation disorder	Used in GIT disorder (Abdominal Pain)	Used in Fever	Used in Sexual dysfunction	Other (Cough)
Leaf	70	38	51	13	-	-
Root	-	-	-	-	17	-
Flower	-	-	-	-	-	7



Graph No 1: Ethnomedicinal Data of *Tubiflora acaulis* (Acanthaceae)

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