

ETHNOBOTANICAL STUDIES ON PLANTS USED BY TRIBAL'S OF SOUTHERN SATPUDA RANGES FROM JALGAON DISTRICT(M.S.)

I.B. Salunkhe

Associate Professor and Head Department of Botany
Sunderrao Solanke Mahavidyalaya ,Majalgaon, District-Beed (M.S.)
Author Email. Id : ibsalunkhe8@gmail.com

Abstract : In the present work, ethnobotanical investigation of Southern Satpuda ranges has been carried out. A total number of 63 plant Species belonging to 59 genera and 38 families have been recorded. Besides, one plant belonging to Pteridophytes also recorded.

Data are collected after discussion with tribal's. Plants are arranged alphabetically according to their scientific names, families, vernacular names, Plant parts and uses.

Key Words:- Ethnobotany, Southern Satpuda, tribal's, plant utilization.

INTRODUCTION:-

There are more than 200 tribes of aborigines exceeding 30 million in population (Vartak and Gadgil, 1980). Maharashtra state inhabits 47 tribal Communities. The main tribal's of Southern satpuda ranges are Dhanke, Dhavale, Mankar, Nahile, Bhile Pavara, Talawi Pavara, Talawi Bhil and Bhil.

The Pavaras and Dhanke are usually short and slightly built in physique. Though shy in nature from strangers, when they get familiar to someone, one can gain their confidence, then they are cheerful and frank. They are very hard worker. They collect wild fruits, gum, honey, flowers, leaves from forest and hunt wild animals for meat. They use arrow and bows made from bamboo. Due to reserved forest, agriculture area is negligible (Karnik, 1959).

They have three famous festivals namely Indraja, Diwali and Holi. Indraja, apparently in honour of God Indra. It's chief ceremony consists in planting a *Mitragyna parvifolia* branch in front of a Jamindar's house. The worship begins at midnight. Holi is celebrated in March. They drink liquor from flowers of *Madhuca longifolia* and dance up to morning.

MATERIAL AND METHODOLOGY:-

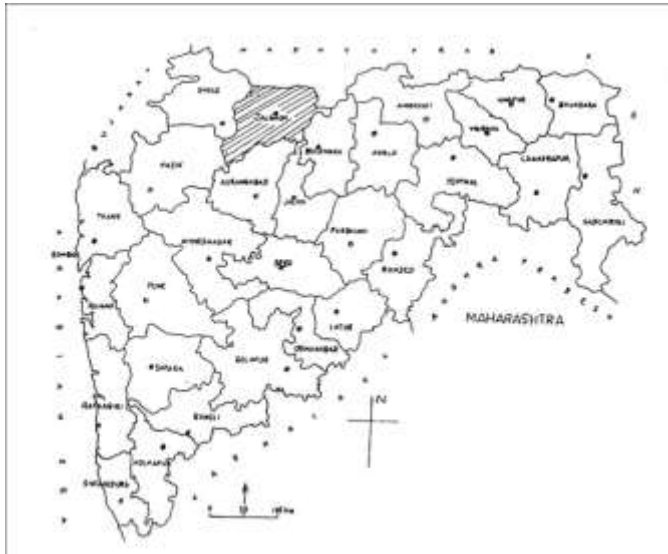
In the present work, ethnobotanical investigation of Southern satpuda ranges (Chopda, Yawal and Raver taluka) has been carried out during June 1991 to December 1995. In addition to this, the survey has been done during 2017 to 2019. During this investigation an emphasis was given on the documentation of different modes of plant utilization, Such as religious and cultural purposes, house construction, agriculture equipment, wild edible, medicinal and poisonous plant, fodder, fuel and miscellaneous use etc. Species were brought to the laboratory and identification with the help of floras such as Cooke (1958) and Santapau (1967). Data are collected after discussion with tribal's. Plants are arranged alphabetically according to their scientific names, families, vernacular names and plant parts and uses.

RESULT AND DISCUSSION:-

In the present study a total number of 63 plant species belonging to 59 genera and 38 families have been recorded Fabaceae is the dominant family with 06 species. Followed by Poaceae with 04 species.

For construction of huts tribal's used different plant parts. Roof of the huts are usually thatched with the leaves of *Tectona grandis* and *Butea monosperma* or tough grass like, *Themeda quadrivalvis* and *Sorghum halepense*. Hard wood poles of *Dalbergia latifolia*, *Tectona grandis* and *Hardwickia binata* are used as pillars and the supporting pillars are made from *Soymida febrifuga*, *Pterocarpus marsupium* and *Haldina cordifolia*. Horizontal beams are made from *Tectona grandis* and bamboo. Partition walls are usually made from long sticks of *Carvia callosa* partition walls are also made from *Dendrocalamus strictus* and *Vitex negundo*; which are strengthened with a plaster of mud or cow dung (Hamid and Raina, 2014; Sanjeev and Sasidharan, 1997; Samar and Srivastava, 2015; Knvar and Shinde, 2019).

Pavara and Dhanke has usually two thatched huts, one for family and other for cattle. The hut is surrounded by fense which is made by Teak pole or Bamboos.



Map of Study Area (1,2)



Map of Jalgaon District

Table.1 List of plant species used by the tribes of Southern satpuda ranges.

Sr. No.	Scientific Name	Family	Local Name	Plant parts used and mode of administration.
1	<i>Abrus precatorius</i> L.	Fabaceae	'Gunj'	Leaves are edible.
2	<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae	'Hiwar'	Leaves used as a fuel and bark powder used for diarrhea.
3	<i>Acacia chundra</i> (Roxb.) Willd.	Mimosaceae	'Kher; 'Khair'	Gum collected by native tribal's.
4	<i>Acacia nilotica</i> (L.) ssp <i>indica</i> (Bth.) Brenan.	Mimosaceae	'Babul'	Branches lopped for goat fodder. wood used as timber and agriculture equipment.
5	<i>Aegle marmelos</i> (L.) Correa.	Rutaceae	'Bila' 'Bel'	Leaves is eaten to cure fever. A sacred plant.
6	<i>Apluda mutica</i> L.	Poaceae	'Pocha'	Used as a fodder.
7	<i>Andropogon pumilus</i> Roxb.	Poaceae	'Lal gawat'	Used as fodder for cattle and cow.
8	<i>Anogeissus latifolia</i> (Roxb.ex Dc.) Wallich ex Guill and Perr.	Combretaceae	'Dhaura' 'Dhavda'	Wood used as timber and Agricultural equipment.
9	<i>Azadirachta indica</i> A.Juss.	Meliaceae	'Neem' 'Nimb'	Tender twigs are used as tooth brush for tooth problem, leaves used as insecticidal, wood used as timber, seed powder mixed with coconut oil and applied for cure skin diseases.
10	<i>Actiniopteris radiata</i> (J. Konig ex sw) Link .	(Pteridophytes) Pteridaceae	'Chandi'	Magico religious purpose.
11	<i>Balanities aegyptica</i> (L.) Delile.	Balanitaceae	'Hingan' 'Hingenbet'	Leaves and bark used as a fish poison. Fruit useful for washing the clothes.
12	<i>Bauhinia racemosa</i> Lamk.	Caesalpiniaceae	'Bhopabo' 'sone' 'Apta'	Leaves lopped for goat fodder.
13	<i>Bombax ceiba</i> L.	Bombacaceae	'Simal' 'Sawar' 'Katesawar'	Cottony wool from seeds used for stuffing cushions.
14	<i>Boswellia serrata</i> Roxb.ex Colebr.	Burseraceae	'Salai' 'Halai'	Used as a fuel
15	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	'Bhahavi' 'Palas'	Dye is prepared from flower and young leaves, which is used in Holi festival.
16	<i>Buchanania axillaris</i> (Desr.)	Anacardiaceae	'Char'	Seeds are edible. used as a tonic.

	T.P.			
17	<i>Capparis zeylanica L.</i>	Capparaceae		Berries used as a vegetable.
18	<i>Carissa Congesta wight .</i>	Apocynaceae	'Karwand'	Fruit is edible.
19	<i>Casearia graveolens Dalz.</i>	Flacourtiaceae	'Pandhari' 'karai'	Fruit used as a fish poison.
20	<i>Cassia tora L.</i>	Caesalpiniaceae	'Tarota'	Leaves used as a vegetable.
21	<i>Cassia fistula L.</i>	Caesalpiniaceae	'Bahawa' 'Bahavi'	Stem used as a pesticide. Bugs run away if the stem is kept on the beds.
22	<i>Cassine glauca (Rottb.) O.Kuntze</i>	Celastraceae	'Jamrasi' 'Aran' 'Butyakalas'	Stem tied on the door to avoid the entry of ghost.
23	<i>Celosia argentea L.</i>	Amaranthaceae	'Rankurdu'	Leaves used as a vegetable. seed and roots used in treatment of kidney stone problem.
24	<i>Chloroxylon swietenia DC.</i>	Rutaceae	'Haldu' 'Bhirra' 'Bihra'	Timber used for preparation of agricultural equipments.
25	<i>Cochlospermum religiosum (L.) Alston</i>	Bixaceae	'Kapas'	Ropes prepared from stem fibres.
26	<i>Cocculus hirsutus (L.) Diels.</i>	Menispermaceae	'Vasanvel'	Whole plant is used to tie grass bundle.
27	<i>Combretum ovalifolium Roxb. ex G. Don</i>	Combretaceae	'Yeloshi'	Branches lopped for goat fodder.
28	<i>Catunaregam spinosa Thunb; Tirveng.</i>	Rubiaceae	'Gel' 'Ragatrohida'	The bark is used as a dye. The bark is a sedative and nervine carminative. It is given internally and externally in the treatment of fevers.
29	<i>Corchorus olitorium L.</i>	Tiliaceae	'Choocha'	Leaves used as vegetable.
30	<i>Cordia dichotoma G. Forst.</i>	Boraginaceae	'Khatu' 'Bhokar'	Fruit is edible.
31	<i>Dalbergia paniculata Roxb.</i>	Fabaceae	'Phassi'	Fruit is edible. The wood is used for tool handles.
32	<i>Dendrocalamus strictus. (Roxb.) Nees Diospyros</i>	Poaceae	'Bambu'	Mobile egg laying basket. Musical instrument flute made from this plant. Basket are made from this plant. Tribal's hunt wild animal's for meat. They use arrow and bow made from bamboo.
33	<i>Diospyros melanoxylon Roxb.</i>	Ebenaceae	'Temru' 'Tendu' 'Temburni'	Both men and women (tribal) smoke bidi which is prepared from crushed tobacco wrapped in dried leaves of this plant. Fruit is edible.
34	<i>Eriolaena hookeriana wight</i>	Sterculiaceae	'Bada murudsing' 'Bhondra' 'Dhaman'	Used as a fuel and for agricultural implements specially axehandles.
35	<i>Ficus religiosa L.</i>	Moraceae	'Pipal'	Branches lopped for goat fodder.
36	<i>Flacourtia indica (Burm.F.) Merr.</i>	Flacourtiaceae	'Bilangada' 'Athruna'	Fruit is edible. The wood is used as fuel and walking sticks.
37	<i>Garuga pinnata Roxb.</i>	Bursaceae	'Katula' 'Kakad'	Fruit is edible.
38	<i>Grewia abutilifolia Vent ex. Juss.</i>	Tiliaceae	-	Fruit is edible. Rope is making from the bark.
39	<i>Grewia tiliaefolia Vahl.</i>	Tiliaceae	'Dhayn'	Timber-for hut construction.
40	<i>Hardwickia binata Roxb.</i>	Caesalpiniaceae	'Anjan'	Wood used for hut construction. Leaves used as fodder. It is also believed that leaves enhances milk production in buffalos. Wood also used for agricultural implements, carts and wheel work and beam used for levelling in farm.
41	<i>Heteropogon contortus (L.) P. Beauv. ex Roem</i>	Poaceae	'Kusali'	Used as a fodder grass.
42	<i>Holoptelea integrifolia (Roxb.) Planch.</i>	Ulmaceae	'Papada'	Seeds are edible. leaves used as a fish poison and wood used as a fuel.
43	<i>Lagestroemia parviflora Roxb.</i>	Lythraceae	'Bondara' 'Lendia'	Wood used as a fuel.
44	<i>Lannea coromandelica (Houtt.) Merr.</i>	Anacardiaceae	'Moian' 'Moin'	Wood used as a fuel. fruit eaten by native tribal.

45	<i>Lantana camera L. Var. aculeata (L.)</i>	Verbenaceae	'Ghaneri'	Fruits are edible.
46	<i>Melia azedarach L.</i>	Meliaceae	'Bankan nimb'	Bark Juice used for hen diseases.
47	<i>Miliusa tomentosa (Roxb.) Sinclair</i>	Annonaceae	'Homb' 'Hoom'	Wood used in hut construction.
48	<i>Moringa oleifera Lamk.</i>	Moringaceae	'Shevga'	Gum is obtained from main branches.
49	<i>Nycatanthes arbortristis L.</i>	Oleaceae	'Parijat'	Grain bins are made from branches. the walls are plastered with cow dung or mud on both sides. Basket also prepared from branches .
50	<i>Pongamia pinnata (L.) Pierre.</i>	Fabaceae	'Kanji' 'Karanji'	Lakh is produced on the main branches. This is used for family planning. Lakh is mixed with water and then given to the female at early morning with empty stomach. Tribals believe that, after this process menstrual cycle of female will be stopped.
51	<i>Pueraria tuberosa (Roxb. Ex willd.) DC.</i>	Fabaceae	'Kohalvel'	Root tubers are edible.
52	<i>Ricinus communis L.</i>	Euphorbiaceae	'Erاند'	Used as a purgative.
53	<i>Scheichera oleosa (Lour.) Oken.</i>	Sapindaceae	'Kusum'	Seeds are edible. Lakh is produce on the young branches which is commercially important. Timber used for house construction.
54	<i>Spondias pinnata (L.F.) Kurz.</i>	Anacardiaceae	'Amra' 'katamba' 'Ambada'	Fruit is edible.
55	<i>Soymida febrifuga (Roxb.) A.</i>	Meliaceae	'Rohin' 'Rohni' 'Rohan'	Timber useful for agricultural equipments.
56	<i>Sterculia urens Roxb.</i>	Sterculiaceae	'Karai' 'Dhavarukh'	Gum obtained from this plant. which is commercially very important.
57	<i>Strychnos potatorum L.</i>	Loganiaceae	'Nirmoi' 'Nirmali'	Leaves used as a fish poison.
58	<i>Tamarix ericoides Rottl.</i>	Tamaricaceae	'Tankli'	Stem is used for preparing the basket.
59	<i>Tectona grandis L.F.</i>	Verbenaceae	'Sag' 'Sagadu'	Grinding equipment-A wooden container (jatyachatala) is made by wood of this plant. The grinding stone is fixed in to centre of the container.
60	<i>Tridax procumbens L.</i>	Asteraceae	'Dagadipala'	Leaf juice applied to wounds as an antiseptic.
61	<i>Varnonia cinera Less.</i>	Asteraceae		Plant juice use to avoid body temperature.
62	<i>Vitex negundo L.</i>	Verbenaceae	'Nirgudi' 'Shehani' 'Ningvadya'	Leaf juice use for scorpion bite. branches used for fencing the huts.
63	<i>Ziziphus glaberrima (Sedgew.) Sant.</i>	Rhamnaceae	'Ghatbor' 'Ghoti'	Branches used for construction of fencing around the huts.
64	<i>Ziziphus nummularia (Burm.) wt. and Arn.</i>	Rhamnaceae	'Bor'	Fruit is edible.



Common musical instruments of Dhanake tribe



Pavara tribes using arrow and bow made up of bamboo for hunting (Indigenous weapon)



'Jatya' (Grinding device) mounted on wooden disc made by Teak wood.



Earthen pots with water, kept on teak wood frame, Which is filled with soil for cooling purpose.

CONCLUSION:-

There is a every possibility that valuable data on ethnobotany will be lost in near future due to rapid intrusion of modern civilization into remote forest areas. The awareness program for conservation of forest should be initiated considering the importance of traditional knowledge among the tribal of Southern satrapuda ranges.

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