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# Studies on plants used by Gond people of Etapalli tahsil from Gadchiroli district for cultural, worship and craft purposes

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#### Manuscript details:

Received: 16.02.2023 Accepted: 20.03.2023 Published: 25.04.2023

#### Cite this article as:

Atram RM, Lonare SS and Jakhi PS (2023) Studies on plants used by Gond people of Etapalli tahsil from Gadchiroli district for cultural, worship and craft purposes, *Int. J. of Life Sciences*, 11 (1): 21-29.

Available online on <u>http://www.ijlsci.in</u> ISSN: 2320-964X (Online) ISSN: 2320-7817 (Print)



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### ABSTRACT

Indian population is conglomeration of large number of different tribes. Most of these people living in vicinity of the forest. According to 2011 census India is second largest tribal population of world. In India Tribal population is 8.9%. Most of Tribal include tribe like Bhill, Kokana, Gavit, Dubla, Korku Dhanka and Mauchi. In India Lakshadweep, Mizoram, Manipur, Nagaland, Arunachal pradesh more than 60% population is tribal. Etapalli is a small city and Tahsil in Gadchiroli District of Maharashtra. According to census 2011 total area of Etapalli Tahsil is 2,267 km<sup>2</sup>. Etapalli Tahsil has a population of 81,713and population density of 36.04 people per sq. km. When it comes to literacy, 53% population of Etapalli Tahsil is literate, out of which 60.23% males and 47.21% females are literate. There are about 180 plus villages in Etapalli Tahsil. In Gadchiroli district, Gond, Mana, Pradhan, Madia tribe predominantly observed from Aheri, Etapalli, Bhamragad, Sironcha and Dhanora tahsil. Most of the tribal people utilized available plants from surrounding for purposes of food, fodder, and medicine, spiritual and for handicraft purposes. Most of population from this area is depending on forest and engaging them self in collection and utilization of timber and non-timber forest products and resources. In present study 31 different plants used by Tribal's of Etapalli Tahsil for the purposes of food, fodder, medicine, handicraft, fish poison, beverages, spiritual and for other purposes were discuses in this paper. Along with the information photographs of these plants and their products were included.

**Keywords:** - Etapalli, Gadchiroli District, Tribal, Cultural and worship, Gond tribe

# INTRODUCTION

Plants play a significant role in the life and culture of Tribal people. Religious and ceremonial plants refer to a group of sacred plant species that are used in various rituals by Tribal people of Gadchiroli district. Gadchiroli district is situated on the North-East side of the Maharashtra State in India & is well known for dense forest; having State borders of Telangana and Chhattisgarh. The district is covered with hills and forests and is considered as a tribal area of Maharashtra. The forests are Predominantly in Etapalli, Aheri, Dhanora, Korchi, Kurkheda, Sironcha and Bhamraged blocks. The district has forests cover near about 76% of the geographical area of the district. District is famous for Bamboo and Tendu leaves.

Population of Gadchiroli district comprises various Tribal communities who are living in scattered and small patches of forested belts and away from mainstream population. Their social, cultural, and economic patterns differ from region to region. These aborigine people maintain a close relationship between the community and their surroundings, hence found to have great knowledge on the use of plants for various spiritual, cultural and various other purposes.

Tribal's have developed their own traditional knowledge related to plant Medicine, Cultural, Worship, Musical instruments, Dancing, Singing, Fishery and Oil extraction, etc. The information pertain mainly to Gond, Madia Tribes particularly their primitive group from Gadchiroli district. They well knew about the Utilization. Local people depend on the forest and its products for their livelihood. Most of the people utilized available tribal plants from surrounding for purposes of food, fodder, and medicine, spiritual and for handicraft purposes.

Beside Tendu leaves and Bamboo, aboriginals were depending on timber and other Non- Timber Forest Produce such as commercially important Medicinal and Plant resource. The area is rich in *Aegle marmelos* L., *Bambusa arundinaceae* L., *Bombax ceiba* L., *Borassus flabellifera* L., *Butea superba* Roxb., *Buchanania cochinchinensis* Lour., *Cleistanthus collinus* (Roxb).Benth.ex Hook.f., *Diospyros melanoxylon* Roxb., *Madhuca longifolia* var.latifolia, *Semecarpus anacardium* L.f.. workers like Jain, (1987, 1988, 1989), Roy (1989), Jain and Sing (1997) and Gadgil *et.al* (2000, 2005, 2005a). The information regarding Spiritual, Cultural and Handicraft utilization of various plant species was obtained from local residents, Gayta, and knowledgeable persons from study area. Methodology has been divided in to Questionnaire while interactions, GPS photography, Field walks and group discussion.

To explore the study area frequent visits are arranged with 5 different knowledgeable persons. Information gathered from various interactions recorded in field diary and finally tabulated in table. The field visits and interactions were conducted in village's viz. Kandoli, Burgi, Koreli and Gattepali.

During field visits to study area information regarding plants was collected, photograph were taken by using GPS enabled camera but in these remote area due to non availability of network GPS coordinates not recorded in the images (Plate-1,2). Plants were identified by using standard literature (Hooker, 1872-1877; Cooke, 1967; Naik 1998; Singh and Karthikeyan 2000; Yadav and Sardesai 2002). Authentication of plants made by using local flora knowledgeable persons and with the help of local experts. All collected information tabulated in the form of table (Table-1) and figures (Figure 1-4).

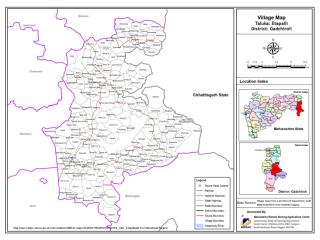


Fig: 1. Location Map of study area.

# **MATERIALS AND METHOD**

Study was conducted during July 2022 to February 2023. For the present study Etapalli tahsil of Gadchiroli District was selected. Methodology for present work was adopted from some of the earlier

# RESULTS

From the present study out of documented 31 plants through interactions with local knowledgeable persons, utilities recorded are like, Food-14, Worship-

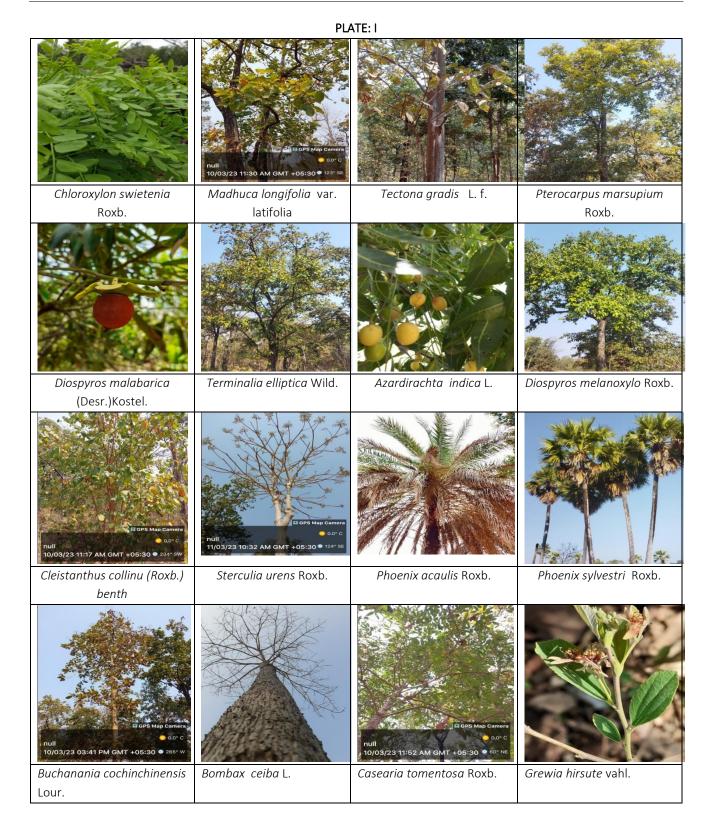
7, Medecine-2, Craft-13, Fiber and making of leafy plates -5 each, fish poison-3, mosquito repellent and for the purpose of dying 01 each.

In the present study various plant parts like Fruit- 12, Leaves-11, Stem- 9, Seed and Bark - 03, Inflorescence2 and Flower, Latex, Root and Whole plant- 01 each reported to be used for fulfilling various livelihood of local population of Etapalli Tahsil of Gadchiroli District.

Sr	Botanical	Monocot	Family	Local Name	Gondi /	Plant Part Used	Purposes of use
No	Name	/ Dicot			Name	by Gond	
						community	
1.	Aegle	Dicot	Rutaceae	Bel	Mahka	Fruit	The fruit is used in Worship and
	marmelos L.				महाका		Fruit is also consumed as Food.
2.	Azardirachta	Dicot	Meliaceae	Neem	Vepamarh	Whole Plant	The whole plant parts are used
	indica L.				a		in traditional medicine.
					वेपा		
3.	Bambusa	Monocot	Poaceae	Bamboo	Vedur	Stem	Stem is used as Bamboo Craft
	arundinaceae				वेदूर		and For shed purpose and
	L.						young shoot is used as Food.
4.	Bombax ceiba	Dicot	Malvaceae	Katesavar	Leki	Stem, flower	The Stem used to make Boat
	L.				लेकी		and Flower used in Spiritual
					· · · ·		purposes.
5.	Boswellia	Dicot	Burseraceae	salai	Aale	Stem	Stem is used in marriage and
	<i>serrata</i> Robx.				आले		also in religious ceremonies.
							Stem is used in make Boat for
							Animals to feed Fodder.
6.	Borassus	Monocot	Arecaceae	Taad	Taadi	Fruit, Leaves,	Fruits consumed as raw. Leaves
	flabellifera L.				ताडी	Inflorescence,	used as broom, handicraft.
						Spadix, Petiole,	Inflorescence is used to make
						Seed, Stem	Beverages. The spadix and
							Petioles are used to make rope
							and Seed Consumed as food.
							Stem consumed as Food.
7.	Butea superba	Dicot	Fabaceae	Palasvel	Motum	Stem, Leave	Stem is used to make Ropes and
	Roxb.				मोटूम	,	Leaves are used to make plates.
							F
8.	Buchanania	Dicot	Anacardiaceae	Char	Reka	Leaves, Fruit	Leaves are used in Worship and
	cochinchinensis				रेखा		to make Plates. Fruit is
	Lour.						consumed as Food.
9.	Caryota urens	Monocot	Arecaceae	Gorka	Gohga	Inflorescence	Inflorescence is used to make
	L.				गोह्गा		Beverages.
10.	Careya	Dicot	Lecythidacae	Kubha	Kumul	Root	The Roots are used as poison
-	arborea Roxb.				कुमुळ		for fishes.
					33		
11.	Casearia	Dicot	Salicaceae	modgi	Minah	Fruit	The Fruits are used as poison
	tomentosa				marha		for fishes.
	Roxb.				मिन्हा		
12.	Chloroxylon	Dicot	Rutaceae	Behru	Nulle	Leaves	The Leaves are used to avoid
	swietenia				नुल्ले		Mosquito.
	Roxb.				0.		-
13.	Cleistanthus	Dicot	Phyllanthaceae	Garadi	Olasa	Stem, Bark	The Stem used for Timber.
	collinus				ओळसा		Bark is used as Poison for
	(Roxb).Benth.e						Fishes.
	x Hook.f.						
14.	Cyperus	Monocot	Cyperaceae	Nagarmotha	Mahaku	Stem	Stem are used to make Mats.
	rotundus L.			_	महाकु		
L	1	1			• 5		

Table 1: Plant Used by Tribal People's from Gadchiroli District of Maharashtra.

15.	Diospyros malabarica (Desr.) Kostel.	Dicot	Ebenaceae	Temburi	Tirka तिरका	Fruit	Dye is Extracted from Fruit.
16.	Diospyros melanoxylon Roxb.	Dicot	Ebenaceae	Tendu	Tumir तुमीर	Leaves, Fruit, Stem	The leaves are used to make Plates and Bowls. Fruit consumed as Food and Stem is used as Brush.
17.	<i>Grewia hirsute</i> vahl.	Dicot	Tiliaceae	Govli	Neyrachi नेयराची	Stem, Fruit	Stems are used as broom and Fruit are consumed as food.
18.	<i>Grewia tiliifolia</i> Vahl.	Dicot	Tiliaceae	Dhaman	Kehla केह्ला	Stem	Stem used as Axe handle shaft.
19.	Hibiscus sabdariffa L.	Dicot	Malvaceae	Ambadi	Jeyha जेया	Leaves, Fruit, Bark	Leaves and Fruit used as a leafy vegetable. Bark is used to make Rope.
20.	Madhuca longifolia var. latifolia	Dicot	Sapotaceae	Mahua	Irpi इरपी	Leaves, Fruit, Seed, Latex	Leaves are used in Worship and to make a plates and bowls. Fruit are consumed as food and used to make Mahua liquor. Oil is extracted from Mahua seed and White latex is used as worship.
21.	Manilkara hexandra Roxb.	Dicot	Sapotaceae	Khirni	Pale पाले	Fruit	Fruit is consumed as Food.
22.	Oroxylum indicum L.	Dicot	Bignoniaceae	Tattu	Kondhuht a कोंधउटाह	Fruit	Fruits are used to make Pickle.
23.	Phoenix sylvestris Roxb.	Monocot	Arecaceae	Shindi	Indhi इंधी	Leaves, Stem	Leaves are used to make mat and Craft. Inner part of young stem is used as food.
24.	Phoenix acaulis Roxb.	Monocot	Arecaceae	Wild Shindi	Indhi इंधी	Leaves, Stem	Leaves are used in Worship and to make rope. Inner part of young stem is used as food. Leaves are used for shed purpose.
25.	Pterocarpus marsupium Roxb.	Dicot	Fabaceae	Beeja	Vengoh वेन्गोह	Leaves	Leaves are used as fodder for Animal.
26.	Soymida febrifuga (Roxb.) A. Juss.	Dicot	Meliaceae	Rohan	Rohdi रोहडी	Stem	Stem is used as Timber. Bark used as mat by local people.
27.	Semecarpus anacardium L.f.	Dicot	Anacardiaceae	Bibba	Kohka कोह्का	Leaves, Fruit, Seed	Leaves are used in Worship and to make a plates, bowls at spiritual time. Fruits are used as Food. Seeds are used to treatment of injury.
28.	<i>Sterculia urens</i> Roxb.	Dicot	Sterculiaceae	Sardol	Hitum हितूम	Bark	Bark is used to make Rope.
29.	<i>Tectona gradis</i> L. f.	Dicot	Verbenaceae	Sagwan	Teka टेका	Stem	The Stem of <i>Tectona</i> is used in different types of Furniture.
30.	Terminalia elliptica Wild.	Dicot	Combretaceae	Ain	Mardi मर्दी	Leaves, stem	Leaves are used in worship and Stem is used as Timber.
31.	<i>Xylia xylocarpa</i> Roxb.	Dicot	Mimosaceae	Suriya	Kali कडी	Stem, Seed	Stem is used as Timber and Seeds are Consumed as food.



	1		
Chloroxylon swietenia Roxb.	Boswellia serrata Roxb.	Careya arborea Roxb.	Hibiscus sabdariffa L.
E OPS Map Cardes Pull 10/03/23 04:27 PM GMT +05:30 • 278* W			E GPS Mas Generation 00° C 10/03/23 03:44 PM GMT +05:30 C 2:4* W
Bambusa arundinacea L	Cyperus rotundus L.	WORSHIP PLACE	<i>Xylia xylocarpa</i> Roxb.
	El GP3 Map Camera null 10/03/23.10:14 AM GMT +05:30 @ 272* W	E GPS Map Camera 0.02 C null 10/03/23 11:15 AM GMT +05:30 • 113* 55	Dull 0.075   10/03/23 11:17   AMIL 0.076   2.07 2.07
Butea superba Roxb.	Caryota urens L.	Soymida febrifuga (Roxb.) A.	Phoenix acaulis Roxb.
		Juss.	
E GPS Map Cannet null 10/03/23 11:39 AM GMT +05:30 • 342' N			
Semecarpus anacardium	WORSHIP PLACE	Bamboo basket	Teak wood Container for
L.f.			Tobacco

PLATE: II

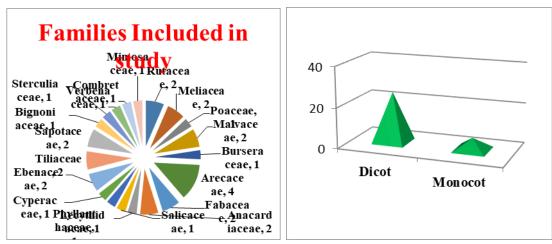


Fig: 3 Representation of families in study. Fig: 2 Proportion of Dicot and Monocot Plants from study area.

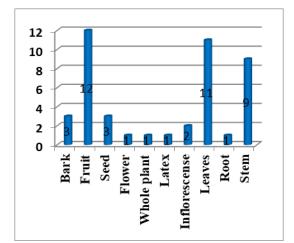


Fig: 4 Plant parts used by local community from study area.

## DISCUSSION:

In present study we have documented Cultural, spiritual and handicraft uses of 31 plant species important to local peoples of Etapalli tahsil, some of these plants mentioned by Chavan (2014) for medicinal uses in and around Etapalli forest range in Gadchiroli district. In present study importance of 31 different plant species from Etapalli Tahsil of Gadchiroli district described for religious, cultural and other purposes while, Sharma et. al. (2014) has given idea regarding rites, sacred, taboo, ceremony and magical beliefs from Tripura state, few of the utilities of plant species are found common in both area. Anju et. al. (2018) has studied Biogenic Properties of Indian Tribal Plants from Tamilnadu state. Some of the plants mentioned in present study are also mentioned in the report of Science and Technology Resource center, Gondwana University Gadchiroli.

Herbal fish stupefying plants are widely used by local community since long time and these methods are supposed to be eco friendly also. In present study roots, fruit and bark of *Careya arborea* Roxb, *Casearia tomentosa* Roxb and *Cleistanthus collinus* (Roxb). Benth. ex Hook.f. used by local people as fish stupefying plant. Heda and Kulkarni (2009) also mentioned these plants used for the same purpose from Mendha (Lekha) village from Dhanora Tahsil of Gadchiroli District.

Deogaonkar, (2008) has mentioned some of the Traditional handicrafts of the Gond tribes of Vidarbha region from Maharashtra, Dahare and Jain (2010) from Multai, District Betul, Madhya Pradesh; Sharma and Pegu (2011) studied Religious and supernatural beliefs of the missing Tribes of Assam State, Khan (2013) from Thane District, Khonde *et. al* (2014) from Gadchiroli dist, Chavhan and Margonwar (2015) from Markanda forest range of Gadchiroli District, Shambharkar and Gogle (2017) and Shende (2017) from Gadchiroli District, Chhetri et. al (2020) has studied Socio-cultural and religious use of plants by ethnic communities of Darjeeling and Sikkim, Sawane et. al. 2020 From Gadchiroli District, Sanjib and Shashi (2021) from Orissa; Mishra et.al.(2021) from Maharashtra, Jakhi P. S., (2021) has mentioned uses of various medicinal plants from Gadchiroli district of Maharashtra and Naqvi et al. (2022) also studied ethnobotanical information of various plants from seminary hill area of Nagpur. Various plants mentioned in present study also mentioned in above cited literature for economical, spiritual, cultural and other purposes from different geographical areas of India.

# **CONCLUSION:**

- The main objective of the present study is to document the plant species used by local people of Etapalli tahsil for Cultural, Worship and handicraft purposes. A total 31 species from 20 families are documented out of these, 25 plant species belongs to 17 Dicot families and 6 plant species belongs to 3 monocot families.
- 2. From present study it has been observed that more than one part of plant is used for economical, spiritual, cultural and handicraft purpose.
- 3. It has been observed that tribal Gond community from Etapalli tahsil is giving importance to food, and Craft purposes while importance is also given to purposes like worship, fiber, plate making, fish poisoning and mosquito repellant as well as dying purpose.
- **4.** A lot to be done in this promising field of livelihood of tribal people with the active support of village people so that importance of knowledge regarding utilities of plant species for various purposes could be rejuvenated for the benefit of our future generations and also need to improve living standard of local people.

# Acknowledgement:

Authors are thankful to Director Institute of Science, Nagpur and Nagesh Atram, Ramesh Madavi, Poriya Atram, Sainath Atram and Suraj Madavi for active participation and sharing their valuable views regarding utilization of various plants from surrounding. Authors are also thankful to residents of Kandoli, Koreli, and Gattepalli villages of Etapalli tahsil. Thanks are also due to PG Botany students of Institute of Science, Nagpur for encouragement and help during data compilation.

**Conflicts of Interest**: The authors declare no conflict of interest.

## REFERENCES

- Anju K, Anitha Jegadeeshwari L, Vidhya Lakshmi D, Nagendra Gandhi N, (2018), A Review On Indian Tribal Plants and Their Biogenic Properties, *Asian J Pharm Clin Res*, Vol *11*, Issue *4*, Page 43-49.
- Chandrakant B Shende, (2017), Ethnomedicinal study of Gadchiroli reserve forests Maharashtra , *Int ern a tio na l Jo u rna l of Appli ed R esea rch 3(3)*, 100 - 1 0 2.
- Chavhan P. R., 2014, Diversity of Medicinal Plants in and Around Etapalli Forest Range in Gadchiroli District *The Journal of Agriculture and Natural Resources Sciences*, 1(2):114-117.
- Cooke T. 1967. The Flora of the Presidency of Bombay. Vol.I, II, III. Botanical Survey of India. Calcutta. (Second Reprint.)
- Deogaonkar S G, (2008), Traditional handicrafts of the Gond tribes of Vidarbha, Maharashtra, *Indian Journal of Traditional Knowledge*, Vol. 7 (1), 2008, pp. 53-55
- Dinesh K. Dahare and Aruna Jain, (2010), Ethnobotanical Studies on Plant Resources of Tahsil Multai, District Betul, Madhya Pradesh, India; *Ethnobotanical Leaflets* 14:694-705.
- Gadgil M., Achar, K.P., Bhat, Harish., Bhat, P.R., Deshmukh, Shubhada., Dolke, Ajay.. Dolke. Y.N., Edlabadkar, V., Gogulwar, S., Gokhale, Yogesh., Gunaga, Shrikanth.. Gundappa, B.V., Heda, Nilesh., Hiralal, M.H. Indiramma, Kailash., Malhotra, C. Naik, M.B.. Nalini G., Rekha., Pandharipande, Kaustubh., Patgar, S.G., Ramakrishnappa.. Seshagiri., Rao., Sivan, V., Srinidhi, S. Sujitha, S., Subramanian, K.A. Devaji, Tofa and Yetiraju, 2005. People's Biodiversity Register: A Methodology Available online Manual. at http://ces.iisc.ernet.in/hpg/cesmg/.
- Gadgil, M., Gokhale, Y. and Seshagiri Rao P.R., 2005a. People's Biodiversity Register. available on line on http://wgbis.ces.iisc.ernet.in/biodiversity/sahyadri\_ene ws/ newsletter/issue 15/article.htm
- Gadgil, M., Rao, P.R.S., Utkarsh G., Pramod, P., Chhatre, A. 2000. New meanings for old knowledge: People's Biodiversity Register Program. Ecological Applications 10 (5) pp. 1307-1317.
- Geetamani Chhetri, Dinesh Bhujel and Y K Rai, (2020), Sociocultural and religious use of plants by ethnic communities of Darjeeling and Sikkim Himalayas, *Journal of Traditional and Folk Practices*, 07, (1&2) 08 (1) 64-79
- Heda Nilesh Kamalkishor & Kulkarni KM, (2009), Fish stupefying plants used by the Gond tribal of Mendha

village of Central India, *Indian Journal of Traditional Knowledge* Vol. 8 (4), October pp. 531-534

- Hooker, J.D. 1872-77. The Flora of British India, Vols I-VII Reeve and Co., London, England.
- Jain, S.K. 1987. Ethnobotany-its scope and various sub In manual of Ethnobotany, (Ed.) S.K. Jain, Scientific publishers Jodhpur. 1-11.
- Jain, S.K. 1988. Detailed Proforma for field work in Ethnobotany. Ind. Training Course 1 Ethnobotany 10-18 March 88 at Lucknow: 16.
- Jain, S.K. 1989. Methods and Approaches in Ethnobotany. Society of Ethnobotanist, Lucknow, pp. 1-192.
- Jain, S.P. and Singh, S.C. 1997. An Ethnomedico- Botanical survey of Ambikapur District, M.P. Scientific publishers, Jodhpur 83-91.
- Jakhi P. S., (2021), Book chapter in book Traditional Medicinal Plants Volume – 3, AkiNik Publications 169, C-11, Sector - 3, Rohini, Delhi-110085, Chief Editor: Dr. P. Shivakumar Singh Herbal Traditional Medicines Used by People of Gadchiroli, District from Maharashtra, ISBN: 978-93-90846-88-7 Book DOI: https://doi.org/10.22271/ed.book.1136 65-80
- Khonde VS, Kale MC, and Rupesh Badere (2014), Ethnomedicinal Plants Used By Gond /Madia Tribes Of Etapalli, Bhamaragarh, Gadchiroli, District Gadchiroli. International Journal of Researches Biosciences, Agriculture & Technology, Volume-II Issue-2, P.725-733.
- Naik, V.N. 1998. Flora of Marathwada. Vol.I & II, Amurt Prakashan, Aurangabad. 431003
- Nikhat Naqvi, Sarika Gurao and Pitambar Humane, (2022), Ethnobotanical Survey on Trees of Seminary Hills, Nagpur (M.S.): An Approach Towards Plant Conservation, *Current World Environment*, Vol. 17, No. (3) 2022, Pg. 678-689 www.cwejournal.org
- Pankaj R. Chavhan and Aparna S. Margonwar, (2015), Ethnobotanical Survey of Markanda Forest Range of Gadchiroli District, Maharashtra, India; *British Journal of Research* (2)(1), 055-062.
- Roy, G.P. 1989. Tribals and Ethnobotany of Abujh Marh Reserve area of Bastar distt. Problem of wasteland and forest ecology (Ed) Promod Singh, Ashish publishing house, New Delhi. 328-338.
- Sanjib Kumar and Shashi Kumari, (2021), Ethnobotanical Plants Used In Socio-Religious And Cultural Ceremonies of Tribes Of Sahebgan district, Jharkhand, *International Journal of Creative Research Thoughts* (IJCRT) Volume 9, Issue 8: 2320-2882.
- Sawane Archana, Chandrama Meghnad and Shrungarpawar Nishi, (2020), Ethnobotanical study of medicinal plants used by tribal people Wadegaon and Ghot villages of Gadchiroli district of Maharashtra state, Int. J. of Life Sciences; 8 (2):411-416
- Shambharkar RB and Gogle DP (2017), International Ethnomedicinal plants used by tribal people of Gadchiroli Maharashtra for the treatment of Cancer, *International Journal of Botany Studies*, Volume 2 Issue *3*; 76-78.

- Sharma M., Sharma CL and Debbarma J (2014), Ethnobotanical Studies Of Some Plants Used By Tripuri Tribe of Tripura, NE India With Special Reference To Magico Religious Beliefs, *International Journal of Plant*, *Animal and Environmental Sciences*, Vol-4, Issue-3,P. 518-528.
- Singh. N.P. and Karthikeyan, S. 2000 Flora of Maharashtra state. Dicotyledones Vol. 1. Botanical Survey of India. Calcutta.
- Uma Kanta Sharma and Shyamanta Pegu, (2011), Ethnobotany of religious and supernatural beliefs of the Mising tribes of Assam with special reference to the 'Dobur Uie', *journal of ethnobiology and ethnomedicine*: *7:16, 1-13.*
- Virendra Kumar Mishra, Prabhu Nath Shukla, Gurudatta Singh, Deepak Gupta and Guruvaiya Bhanaviya Durge (2021), Ethnomedicinal applications of forest plants for the treatment of common ailments by Gond and Madia tribes of Maharashtra, India; *Environmental Sustainability* 4:123–142.
- Yadav. S.R. and Sardesai, M.M. 2002. Flora of Kolhapur District. Shivaji University Press, Kolhapur.
- Zafar S. Khan, (2013), Ethnobotanical survey of Thane district, Annals of Pharmacy and Pharmaceutical Science, (4) 1&2, 22-25.

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