



Few Ethano-Botanical Medicinal Plants from Toranmal Plateau, Maharashtra, India

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Abstract: A survey has done on medicinal plants of Toranmal Plateau of Nandurbar district, Maharashtra, India, when data was collected, attention given to the specific diseases of human being. Some common diseases like allergy, arthritis, asthma, blood purifier, body pain, boils, bone fracture, and brain tonic etc. are very common. About 37 plant species are found to be used by tribal people in the Toranmal plateau to cure above diseases.

Index Terms: Enter Toranmal plateau, Maharashtra, medicinal plants, specific diseases.

I. INTRODUCTION

Toranmal plateau is a part of Nandurbar which is the newly constituted district in the state of Maharashtra (Anonymous, 2010; Bankar V. V. & P.P. Sharma. 2016). As much as 65% of the population of the district is tribal. Satpuda Mountain is a range of hills in central India. The range rises in eastern Gujarat state near the Arabian Sea coast, running east through the border of Maharashtra and Madhya Pradesh to the east till Chhattisgarh. Satpuda Range, range of hills, part of the Deccan plateau, western India. The hills stretch for some 560 miles (900 km) across the widest part of peninsular India, through Maharashtra and Madhya Pradesh states. The district can be divided into hilly tracts and undulating plain areas. The hillocks of Satpuda are flat-topped and plain. Highest elevation is recorded at Toranmal hills rising up to 3373 ft. with a lake on its top. Very small part of Narmada basin is towards the west. The name of Satpuda is given because of the seven folds forms the watershed between Narmada (north) Tapi (south) rivers.

Toranmal Plateau is one of the important plateaus in mid Satpuda in northern Maharashtra. This plateau forms a table land and summit covering about 41 Sq.Km. area at 1155-meter altitude (AMSL). It lies in western Satpuda Mountain which is a horst block between Narmada graben on north and Tapi in the south. Because of its scenic beauty it has a long historical background. The total plateau summit area covers 41 Sq. Km. and extend between 21 ° 54' North to 21 ° 61' latitude and 74° 26' to 74 °34'

East longitude. This is one of the best hill stations and famous tourist resort in North Western Maharashtra, (Anonymous, 2010).

II. MATERIAL METHODS

The data presented is based on personal interviews and observations of informants (Anonymous, 1988-2008). The indigenous knowledge of local people regarding plants was gathered by intensive ethnobotanical explorations. The area visited annually for 4-5 times for covering different villages and hamlets of study area and each visit lasted for about 5-6 days. During the field investigation, for plant collection and documentation of data, the informant accompanied the author/s. Sometimes more than one informant was included in the team. Each use of the plant has been confirmed and verified during different visits to different localities in the region and even with the same informants on different occasions. The uses were considered valid if at least 2 informants had similar remarks about the uses of the plant. During the field work 2-3 voucher specimens of each useful plant and plant part used in medicine were collected and numbered. The voucher specimens were made mostly at flowering or fruiting stage according the standard methods (Jain & Rao, 1976). Their description, uses and other details were recorded in the field book and in ethnobotany data sheets, which is based on (Jain 1995). Collected plant specimens were identified with the help of keys to families, genera and species provided in standard floras (Patil, 2003), (Cooke 1958, 1967), (Sharma *et al.* 1996), (Singh *et al.* 2000 & 2001) (Bankar 2016) etc.

III. RESULT AND DISCUSSION

Total 37 angiosperm species used for treating different diseases of human being have been recorded. Out of the 37 plant species one species is used for allergy, five used for arthritis. three used for asthma, six for blood purifier, two for body pain, nine for boils, eight for bone fracture, three used for brain tonic are recorded. Maximum number of species used for treating blood purifier,

boils, bone fracture, and brain tonic diseases are from family Fabaceae which is followed by Malvaceae, Solanaceae, Euphorbiaceae.

Table. I. Description of plants

Disease	Botanical name	Local name	Family	Dose and Body Part used
ALLERGY	<i>Emblica officinalis</i>	<i>Avala</i>	Euphorbiaceae	Fruits punctured by niddle and soaked in sugar solution for 15 days then eaten fruit per day regularly for 30 days to strength immunity.
ARTHRITIS	<i>Cuscuta reflexa</i>	<i>Amarvel</i>	Cuscutaceae	Paste of whole plant applied externally on joints.
	<i>Euphrobia tirucalli</i>	Euphorbiaceae	<i>Sher</i>	Latex applied externally on joints to reduce pain.
	<i>Indigofera trifolia</i>	Fabaceae	<i>Vekari</i>	Seed paste warmed and applied over joints for 10- 15 days to treat arthritic pain.
	<i>Ipomoea carnea</i>	Convolvulaceae	Beshram	Leaves warmed and wrapped over joints
	<i>Semecarpus anacardi</i>	Anacardiaceae	<i>Bibba</i>	30-40ml extract of bark with pinch of black pepper powder taken twice a day for 15 days.
ASTHAMA	<i>Aerva lanata</i>	Amaranthaceae	<i>Kapuri-madhuri'</i>	Dry leaves/ flowers smoked like cigarette thrice a day till cure
	<i>Solanum nigrum</i>	Solanaceae	<i>Kangni</i>	One tea cup extract of handful leaves with cooking oil drops taken orally once a day for 21 days.
	<i>Withania somnifera</i>	Solanaceae	<i>Ashwagandha</i>	30-40ml of roots extract with sugar taken twice a day for 7-8 days
BLOOD PURIFIER	<i>Dolichandrone falcate</i>	Bignoniaceae	<i>Medhsing</i>	half cup of leaf extract taken once a day 15 days
	<i>Hemidesmus indicus</i>	Periplocaceae	<i>Anantmul</i>	1-2 gm root powder taken with water or milk as a blood Purifier
	<i>Madhuca longifolia</i>	Sapotaceae	<i>Mohwa</i>	20-30 ml extract of inner bark is taken once in a week for 5 weeks.
	<i>Mimosa hamata</i>	Fabaceae	<i>Arati</i>	Seed extract with sugar about one tea cup taken once a day for 15 days.
	<i>Sida cordata</i>	Malvaceae	<i>Bala</i>	Half tea cup extract of whole plant taken once a day for 15 days.
	<i>Abrus precatorius</i>	Fabaceae,	<i>Gunj</i>	20-30ml extract of handful leaves given once a day for 10 days or leaves eaten raw.
BODY PAIN	<i>Careya arborea</i>	Lecythidaceae	<i>Kumbhi</i>	40-50 ml extract of handful fresh stem bark, twice a day for 3-4 days.
	<i>Flacourtia indica</i>	Flacourtiaceae	<i>Tambat</i>	one tea cup extract of stem bark taken orally twice a day three days.
BOILS	<i>Alangium salvifolium</i>	Alangiaceae	<i>Ankul</i>	Inner bark paste is applied for treating cuts. Boils: Root paste is applied externally on boils for 15 days.
	<i>Bauhinia racemosa</i>	Fabaceae	<i>Apata</i>	20-30ml of stem bark extract taken twice a day for 2-3 days.
	<i>Capparis decidua</i>	Capparaceae	<i>Nepti</i>	Leaves are made into paste which is applied on

				boils.
	<i>Cleome viscosa</i>	Capparaceae,	<i>Pivalitilvan</i>	Seed paste applied on boils which avoids pus formation.
	<i>Hibiscus rosa-sinensis</i>	Malvaceae	<i>Jasvand</i>	Leaf paste with pinch of turmeric powder, applied externally on boils until cure.
	<i>Melia azedarach</i>	Meliaceae	<i>Bakam limb'</i>	Leaf paste applied on boils daily thrice until cure.
	<i>Nicotiana tabacum</i>	Solanaceae	<i>Tambakhu</i>	Leaves crushed with ghee and applied externally until cure.
	<i>Sesbania sesban</i>	Fabaceae	<i>Shevari</i>	Leaf juice applied until cure.
	<i>Trigonella foenum-graecum</i>	Fabaceae	<i>Methi</i>	Boil seeds paste applied externally twice a day until cure.
BONE FRACTURE	<i>Aegle marmelos</i>	Rutaceae	<i>Bel</i>	20-25 ml of bark extract twice a day until cure.
	<i>Caesalpinia bonduc</i>	Fabaceae	<i>Sagargoata</i>	Leaf paste is applied externally and bandaged by using bamboo strips and cotton cloth.
	<i>Cissus quadrangularis</i>	Vitaceae	<i>Kandvel</i>	Plant paste is applied over fractured arm and tied the same as plaster is being done by using bamboo strips, jute thread and cotton cloth. Same is kept for 15-20 days.
	<i>Dodonea viscosa</i>	Sapindaceae	<i>Dedoni</i>	Paste of leaves with turmeric powder in 2:1 proportion mixed with coconut oil and applied, then bandaged by using bamboo strips and cotton cloth as a plaster.
	<i>Grewia hirsute</i>	Tiliaceae	<i>Khirmid</i>	Inner stem bark with pinch of black pepper powder crushed to make paste, taken 1-2gm twice a day until cure.
	<i>Lannea coromandelica</i>	Anacardiaceae	Shimti	Fruits paste is applied and bark is used as a bandage (as a plaster).
	<i>Sterculia urens</i>	Sterculiaceae	<i>Kahandol</i>	1-2gm of stem bark powder taken with milk thrice a day till cure.
	<i>Vanda tessellates</i>	Orchidaceae	<i>Marad</i>	One tea cup juice of leaves and roots with <i>Piper nigrum</i> seeds powder taken orally daily thrice for 7 days (or) applied externally with eggs and red lime powder (Jaju in local language) on factored part and bind with bamboo sticks.
BRAIN TONIC	<i>Bacopa monnieri</i>	Scrophulariaceae	<i>Brahmi</i>	Whole plant extract with honey given 20-30 ml regularly for good memory.
	<i>Cannabis sativa</i>	Cannabaceae	<i>Aphu</i>	1 gm dry leaf powder taken with water twice a day for 15 days
	<i>Centella asiatica</i>	Apiaceae	<i>Brahmi</i>	20-30ml leaf extract with sugar given regularly for good memory.

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