International Journal of Botany Studies
ISSN: 2455-541X
Impact Factor: RJIF 5.12
www.botanyjournals.com
Volume 3; Issue 2; March 2018; Page No. 158-160

Ecological vegetation of some medicinal plants in Nandur Madhyameshwar, Nashik, India

Shinde YP[1], Arangale KB[2], Bhalerao VU [3], Jadhav SA[4]
[1, 2, 3] Department of Botany, Sanjivani Arts Commerce and Science College Kopargaon, Maharashtra, India
[4] SSGM College Kopargaon, Maharashtra, India

Abstract
Nandur Madhyameshwar stream bank of Niphad Tehsil of Nasik district in order to assess some of the numerous medicinal plants present in the area. In totality nearly 27 species of plants have been recorded. Interviews were conducted with local people who reported medicinal uses. These uses are also supported from previous studies. We conclude that it is important to adopt conservation practices for sustainable plant use with and outside the study area in-view of the ecological function of the stream bank and the local therapeutic value of these plant resources.

Keywords: medicinal plants, Nandur Madhyameshwar, ecology

Introduction
In totality nearly 27 species of plants have been recorded. The latter includes - *Ipomea fistula, Ipomea aquatica, Hygrophila auriculate, Polygonum plebeium, Rumex dentatus, Hydrilla verticulata, Vallisneria spiralis, Eichhornia, Typha angustata* etc. Babul, Neem, Tamarind, Jamun, Maharukh, Vilayati chinch, Mango, Nilgiri etc.The diversity of these plants has contributed to the practice of herbal/traditional medicine, making cheaper and more readily available than orthodox medicine Traditional medicinal plants are applied in preventive ways and to treat disease conditions. Therefore, these are being investigated for therefore their possible beneficial effects with aim of bringing adequate and affordable healthcare to mankind [1]. Herbal medicines are reported to be safe with few adverse effects [2]. Compared to synthetic drugs. The surrounding areas and galphera are intensively cultivated for wheat, Jowar, Sugarcane, Vegetables etc. Nandur Madhyameshwar stone pick up weir was constructed in 1907-13 on the river Godavari just below the confluence of Kadwa and Goadavari rivers. The water released from Gangapur and Darana water reservoirs upstream is stored at Nandur Madhyameshwar and subsequently released from here through canals to further places through canals for irrigation. As such the water level is always fluctuating in Nandur Madhyameshwar Lake. Annually lot of silts and organic matter carried away with water flow is accumulated in the lake as such islands and shallow water ponds have been created which has created water ponds, having biological enriched conditions by which aquatic vegetation has been established.

The number of researcher work and studied on ethnomedicinal plants in Maharashtra states of India by Faulk (1958), Petkar *et al.* (2002), Kunwar and Dawadee (2003), Wabale *et al.* (2005) [13], Iqbal *et al*. (2010), Gaykar (2010), Salave *et al.* (2010) [11], Ahir *et al.* (2011) [1], Waghchaure *et al.* (2011) [15], Dhore *et al*. (2012), Pocchi (2013), Shrirame and Hiwale (2013) [2], Wadekar *et al.* (2013) [14], Watile (2013) [16], Zingare *et al*. (2013) [17].

Materials and Methods
Study Area
Nandur Madhyameshwar (20.0079° N, 74.1043° E) Stream flows in a West-East direction and then drains into Godavari River. The vegetation on both sides of the stream functions as an important watershed. A field survey was conducted along the banks of Nandur Madhyameshwar stream located within the premises of for identifying medicinal plants. These informants were selected based on knowledge of the vegetation and uses of plants. The uses of plants were recorded based on the supporting previous studies.

Results
In all, a total of 20 respondents were interviewed. Table 1 indicates the demographic information of the respondents.

Table 1: Demographics of 45 interviewed respondents asked about medicinal plants from along Nandur Madhyameshwar stream bank of Niphad Tehsil of Nasik district.

Characteristic	Frequency	%	Characteristic	Frequency	%
Marital status			Occupation		
Single	4	20	Farmers	14	70
Married	13	65	Civil servants	02	10
Divorced	02	10	Traders	02	10
Widow	01	05	unemployed	02	10
Total	20	100	Total	20	100

Table 2: Etnomedicinal plants identified from the Nandur Madhyameshwar Stream Bank of Niphad Tehsil of Nasik district. Scientific Name, Common Name [3-5] Parts used, Medicinal uses reported by informant in this study is Medicinal uses reported in literature [6-17].

Scientific Name	Common Name	Family	Habit	Parts used	Medicinal uses
Ipomea aquatica	Nalichi Bhaji	Convolvulaceae	Herb	Leaves, Root	Anti-toxic, skin disease
Hygrophila auriculate	Ekhara	Acanthaceae	Herb	Leaves	diarrhoea, dysentery, thirst, urinary calculi, urinary discharges, inflammations, biliousness, anaemia
Polygonum plebeium	Gulabi Godhadi	Polygonaceae	Herb	Leaves	Golic complaints, enzema
Rumex dentatus	Jangali Palak	Polygonaceae	Herb	Root	cutaneous disorders
Hydrilla verticulata	Shakharisheval	Hydrochariteceae	Herb	Whole plant	Antioxidant, boils and wounds.
Vallisneria spiralis	phitichesaivale	Hydrochariteceae	Herb	Leaves	Appetizer; Demulcent; Refrigerant; Stomachic
Typha angustata	Paan kanis	Typhaceae	Herb	Leaves	Anticoagulant, Diuretic Emmenagogue Haemostatic, Lithontripic Miscellany.
Acacia nilotica	Babhul	Mimosaceae	Tree	Leaves, Pod, Inflorescence	Toothache
Azadirachta indica	Kadunimb	Meliaceae	Tree	Leaves, Fruit	anthelmintic, anti-fungal, anti-diabetic, antibacterial, antiviral,
Tamarindus indica	Chinch	Caesalpiniaceae	Tree	Leaves, Fruit	Piles, Anticancer,
Syzygium cumini	Jambhul	*Myrteceae*	Tree	Leaves, Fruit	anthelmintic, anti-diabetic
Alternanthera triandra	Kanchari	Amaranthaceae	Herb	Leaves	diarrhoea, skin diseases, night blindness, indigestion, and fever
Mangifera indica	Amba	Anacardiaceae	Tree	Leaves, Fruit	Diabetes, Dysentery, Gall and Kidney Stones
Eucalyptus globulus	Nilgiri	Myrtaceae	Tree	Leaves	Fever anti-diabetic
Canavalia gladiata	Aabai	Fabaceae	Climber	Leaves and Seed	asthma, obesity, stomach-ache, dysentery, coughs, headache, intercostal neuralgia, epilepsy
Vigna trilobata var. trilobata	Ranmug	Fabaceae	Tree	Leaves and Seed	Eye disorders, diarrhea, burning sensation and anti-inflammatory.
Cucumis melo	Kharbuj	Cucurbitaceae	Herb	Leaves, fruit and Seed	Skin Disorder,
Solanum virginianum	Kateringani	Solanaceae	Herb	whole plant, root, fruit	Fever, skin diseases, cardiac disorders,
Bambusa vulgaris	Bamboo	Poaceae	Sharb	Leaves	Antioxidant, Fever, heart problems and malaria
Carica papaya	Papai	*Caricaceae*.	Sharb	Leaves and Fruit	Acne and skin infection, Improve and preserve good vision, anti- aging.
Ceiba pentandra	Samali	*Bombacaceae*	Tree	Flower, Leaves and Fruit	Chronic dysentery, diarrhea, ascites.
Citrus sinensis	Mosambi	*Rutaceae*	Tree	Flower, Leaves and Fruit	Constipation, gastritis, motion sickness, cramps, colic, obesity, fluid retention, bronchitis, mouth ulcers, nervous tension, depression and stress.
Cocos nucifera	Naral	*Arecaceae*	Tree	Fruit	Ring worms, candidiasis, psoriasis, sores, skin burns, sunburns, toothache, sore throat and ulcers.
Dalbergia sissoo	Shisav	Fabaceae	Tree	Seeds and Leaves	skin diseases, leucoderma, vitiligo vomiting, worm infestation lower abdominal pain, urinary tract disorders, Ulcers, wounds
Euphorbia hirta	Duhia	*Euphorbiaceae*	Herb	Leaves and Flower.	dysentery, diarrhoea and colic
Ficus benghalensis	Vad	*Moraceae*	Tree	Leaves and fruit.	Wound and swelling for quick relief.
Rumex dentatus L.	toothed dock	Polygonaceae	herb	Leaf & Root	This plant has allelopathic activity Traditionally it is *used* as bactericidal, anti-inflammatory, antitumor, anthelmintic, astringent, and anti-dermatitis, in addition, its roots are also *used* in folk medicine for treating acariasis, eczema, diarrhea, and constipation

Conclusion

The present studies have explored interesting data on the plants used as Medicinal Purpose, which provides scope for further Studies of Medicinal Plants. During the study 27 plant species were found which were used as medicinal purposes, which was known from the review of the people who were interviwed

Acknowledgements

Authors are thankful to Principal Sanjivani ACS College for giving facilities and Support.

References

1. Ahir R, Pokale S, Wagh S. Studies on biodiversity of certain medicinal plants of Ahmadnagar region, M.S.,

India. ISRJ. 2011; 1(6):1-4.
2. Shrirame AM, Hiwale SR. Ethnomedicinal Survey for Important Plants of Kalmeshwar taluks, District Nagpur. ISRJk, 2013, 29-31.
3. Almeida M. Flora of Maharashtra, Orient Press, Mumbai, 1998, 1(4).
4. Cook T. Flora of Bombey. Botanical Survey of India, 1908, 123.
5. Pradhan SG, Singh NP. Flora of Ahmednagar District. (MS). Bishen Singh Mahendrapal Singh. Dehra Dun, 1999.
6. Shinde YP, Arangale KB, Bhalerao VU. Ethanobotanical Survey of Kopargaon Tehsil of Maharashtra, World Journal of Pharmaceutical Research. 2017; 6(14):786-792.
7. Subramaniyan KN. Conservation and protection of fast-vanishing endemic and rare gene pool of Western Ghats. Seminar on ecodevelopment of Western Ghats, 1986, 45-46.
8. Sirohi PS. Genetic diversity in 'Momordica dioica 'Indian Horticulture, 1991, 35(4).
9. Tarsem L, Dhaliwal MS. Genetic diversity in Ridged gourd. Indian Horticulture. 1992; 37(2):111.
10. Puranik S. Ethnomedicinal plant diversity in the Himalayan region of India. J Sci. Infor. 2013; 6:120-122.
11. Salave AP, Gopal Reddy P, Diwalkar. Ethanobotanical studies of ghatsiras region in Ahmednagar District, Maharashtra (India), Ann. of phar. And phar. Sci. 2010; 1(2):63-66.
12. Shrirame AM, Hiwale SR. Ethnomedicinal Survey for Important Plants of Kalmeshwar taluks, District Nagpur. ISRJ, 2013, 29-31.
13. Wabale AS, Petkar AS. Ethno medicinal plants used against Jaundice by the Tribals of Akole taluka (M.S.) J Phytol. Res. 2005; 18(2):259-261.
14. Wadekar MB, Tondare MJ, Rangari NU. Ethnomedicinal plant wealth used for the treatment of the Jaundice by the tribal communities of Chandraur District (MS). J Sci. Infor. 2013; 6:159-164.
15. Waghchaure CK, Naik SS, Abhang AR. Ethano-medico-Biochemical studies on Katai Baba sacred grove and near by area of Adhalwadi from Akole taluka Ahmednagar District (Maharashtra), Int. J Phar. And Bio Sci. 2011; 2(3):B393-398.
16. Watile VJ. Diversity of medicinal plants use by tribes in Kelapur tahsil of Yavatmal district, - A case study. ISRJ, 2013, 94-96.
17. Zingare AK, Borkar KM, Jagiya AA. Ethnoveterinary Use of Medicinal Plants from Sakoli Taluka of Bhandara District, MS. ISRJ, 2013, 22-24.