

Wild Edible Vegetables Used for Health Benefit by Rural People of Sindhudurg District in Maharashtra State, India

Ms. Karishma Mohite

PG Department of Botany

S. P. K. College, Sawantwadi, India

Abstract: *The current study focuses on the identification, recording, and ethnobotanical exploration of wild edible plants in the Sindhudurg District of Maharashtra in terms of their food value. A total of 20 wild edible plants were examined. The edible components of wild plants (fruits, flowers, leaves, tubers, and inflorescence) are nature's gift to humans. These wild edibles are delicious, refreshing, and high in vitamins, minerals, and proteins. Some wild edibles have reduced; therefore, significant care should be paid to maintaining and improving this crucial source of food supply.*

Edible Wild Vegetables play an important part in the rural economy of Sindhudurg district, supplying essential food supplements as well as producing additional cash for the impoverished. Locals pick vegetables from natural forests and sell them in the market. Many good veggies are well-known in specific places or communities but unknown to others. Locals often use these wild plants to make pickles, jams, curries, and wine..

Keywords: Ethnobotanical, Edible plants, Sindhudurg, Economy

I. INTRODUCTION

Many developing countries' rural people rely heavily on wild food plants. natural plants are collected from forests and natural areas all over the world. During times of food scarcity, wild food plants provide alternatives to basic foods. The tribal people of the state rarely use traditional medicine based on plant materials. The current article adds to the body of knowledge about the relationship between plant knowledge and use. Wild plants play a vital role in rural areas. Wild edible plants have one or more sections that can be used for food if collected at the appropriate stage of development and properly prepared. Tribal people meet their nutritional needs from wild resources. They learned about wild edible plants historically. This ancient knowledge is useful for creating new food sources. Food plants can enhance a nutritious diet and provide revenue for resource-poor societies. They can provide as a source of domesticated species. In this article, we add to the body of information about the relationship between plant knowledge and usage.

The population explosion resulted in an insufficient supply of food resources such as cereals, pulses, vegetables, and fruits for individuals. Documenting and disseminating the use of wild edible plants in the daily family diet could be a solution to this worrisome problem. Wild edible vegetables provide a significant contribution to the livelihoods of the communities that collect and consume them. According to traditional knowledge, wild edible vegetables or plants play an important role in the nutrition of forest people living in forested environments. A systematic study of edible wild plants is crucial for identifying prospective sources that can be used during times of scarcity and farmed to provide food for the growing population.

The tribal communities, over several years, have developed specialized set of practices using wild forest resources to fulfill their daily needs. This traditional knowledge is a result of the trial and error method followed over the generations (WIPO, undated). The tribes have shown dependence mainly on the wild plant species for purposes such as food, medicine, shelter, and so on (Reddy, 2012; Bhogaonkar et. al, 2010). These wild plants have not only proved to be the source of food for daily consumption but also as a key resource during extreme situations such as famines as well (Chothe et al, 2014; Nene, 2004). Apart from the dietary aspect, the village doctors, locally called as Vaidu, who are aware of the medical properties of the wild edibles, have been successful in providing remedies for several ailments at

the village level (D'souza, 1999; Palekar, 1993). Thus, the wild plants have played a significant role in the livelihood of the tribal communities as they mainly prove to be of dietary and medicinal importance. Realizing this significance, several ethno botanical studies have been undertaken to tap the specific nutraceutical and pharmaceutical potential (Dhore et. al, 2012; Yesodharan and Sujana, 2007; Oak et. al, 2015; Deshmukh and Waghmode, 2011). However, other than their nutraceutical and pharmaceutical potential very few studies have been found to document other interesting information on traditional usage.

II. MATERIAL AND METHODS

The present study area, Sindhudurg district lies between latitude 16.3492° N and 73.5594° E. The survey was conducted in all the season in selected villages. This study has helped to record the indigenous knowledge. Sindhudurg district of konkan region is very well known for natural resources including vegetational wealth and traditional knowledge of medicinal plants. The tahsils in Sindhudurg are Vengurla, Kudal, Sawantwadi, Malvan, Kankavali, Devgad, Vaibhavwadi, and Dodamarg. The data collection was mainly through transecting walk and observation with the key informants. The information collected from local inhabitants, medicinal men, Vaidya's and forest officials. Plants were identified using relevant scientific literature and standard floras.

Results :

Some wild edible plants also have medicinal properties, such wild plants are common in the rural areas. The study in Sindhudurg district revealed that about 20 varieties of plant species in which leaves, flower, inflorescence, fruits, tuber and bulb are mainly used for consumption. The total 20 species of wild edible plants are collected and stored with detailed information. out of which some are herbs, trees, shrubs and climbers. The recorded information of wild edible plants of Sindhudurg district are as follows :

Sr. No.	Vernacular Name	Botanical Name	Family	Part Used	Medicinal and Nutritional Uses
1.	Aaghada	<i>Achyarnthes aspera</i>	Amaranthaceae	Whole Shrub	In traditional medicinal system, A. aspera is known for diuretic and hepatoprotective properties and used to cure several diseases viz., malarial fever, dysentery, asthma, hypertension and diabetics. Dry seeds are Eaten as raw.
2.	Patur	<i>Alternathera sessilis</i>	Amaranthaceae	Leaves	Treat hepatitis, tight chest, bronchitis, asthma and other lung troubles, to stop bleeding and as a hair tonic. Leafy shoots are eaten as vegetables
3.	Punarnava	<i>Boerthavia diffusa</i>	Nyctaginaceae	Leaves	Punarnava is mainly used to treat accumulation of fluids (Oedematous conditions) in the body. It is considered to be an effective "Rasayana". It is also used in the treatment of anemia and liver diseases as recommended by Indian Ayurveda.
4.	Bahava	<i>Cassia fistula</i>	Caesalpinaceae	Flowers	Laxative, anti-inflammatory, for swelling. Fruits used for asthma, diabetes and eczema.
5.	Takala	<i>Cassia Tora</i>	Caesalpinaceae	Leaves	According to Ayurveda the leaves and seeds are acrid, laxative,

					antiperiodic, anthelmintic, ophthalmic, liver tonic, cardiogenic and expectorant.
6.	Kuradu	<i>Celosia argentea</i>	Amaranthaceae	Leaves	Used in traditional medicine for the treatment of headache, sores, ulcers, eye inflammations, skin eruption, painful menstruation and carpal tunnel syndrome.
7.	Alu	<i>Colocasia esculent</i>	Araceae	Leaves	It has been utilized for treatment of various ailments such as asthma, arthritis, diarrhea, internal hemorrhage, neurological disorders, and skin disorders. The juice of corm is widely used for treatment of body ache and baldness.
8.	Kena	<i>Commelina benghalensis</i>	Commelinaceae	Leaves	Laxative, diuretic, carminative and anti-inflammatory. Leaf use in burn.
9.	Peva	<i>Costus speciosus</i>	Zingiberaceae	Leaves	Antioxidant and antimicrobial activity. It is also use as Ayurvedic medicine hence uses to treat fever, rash, asthma, bronchitis, and intestinal worms.
10.	Pipal	<i>Ficus religiosa</i>	Moraceae	Leaves	Used in asthma, laxative, purgative, neuralgia and inflammation.
11.	Ambadi	<i>Hibiscus Sabdariffa</i>	Malvaceae	Leaves	Used for the treatment of high blood pressure, liver diseases and fevers. In large amounts, hibiscus tea acts as a mild laxative. In traditional treatment for high blood pressure, cholesterol reduction. It useful in heat control
12.	Kuda	<i>Holarrhena pubescens</i>	Apocynaceae	Flowers	It has antibacterial and Amoebicidal properties. Also use in piles as well as in general bleeding. Several Indian tribes use this plant in diabetes.
13.	Pathari	<i>Tridax procumbens</i>	Asteraceae	Leaves	Used as a food and washing agent, rheumatism, galactogogues, and increases milk production. Eye redness and itchiness and also traditionally used in kidney (painful urination), liver and sexual diseases like gonorrhoea.
14.	Kavatha	<i>Limonia acidissima</i>	Rutaceae	Fruits	It is used as tonic for heart and lungs, the unripe fruit is used as anti-diarrhoeal, leaves of wood apple are anti-diabetic, fruit pulp is

					used in the treatment of sore throat etc.
15.	Ambuti	<i>Oxalis corniculata</i>	Oxalidaceae	Leaves	This plant is edible and it is used as salad. This plant is anti-scorbutic and used in the treatment of scurvy. This herb is anti-inflammatory, anthelmintic, diuretic, febrifuge, relaxant, stomachic, astringent, analgesic and styptic in nature.
16.	Bhuiawala	<i>Phyllanthus amarus</i>	Euphorbiaceae	Whole shrub	It is an important plant of Indian Ayurvedic system of medicine which is used in the problems of stomach, genitourinary system, liver, kidney and spleen.
17.	Kapalfodi	<i>Physalis Pubescens</i>	Solanaceae	Whole shrub	The whole plant is antipyretic, depurative, diuretic, pectoral, vermifuge. A decoction is used in the treatment of abscesses, coughs, fevers, sore throat etc. An infusion of the whole plant is used as a narcotic
18.	Ghol	<i>Portulaca oleracea</i>	Portulacaceae	Leaves	In folk medicine, acting as a febrifuge, antiseptic, vermifuge. It exhibits a wide range of pharmacological effects, including antibacterial, antiulcerogenic, anti-inflammatory, antioxidant, and wound-healing properties.
19.	Ghotvel	<i>Smilax zeylenica</i>	Smilacaceae	Leaves	It useful blood purification Root and rhizome has antirhumatic, Antioxidant activity. It is also used in the treatment of venereal diseases.
20.	Shevga	<i>Moringa oleifera</i>	Moringaceae	Fruits, Leaves	Used as cardiac and possess antitumor, antipyretic, antiepileptic, antiinflammatory, antiulcer, antispasmodic, diuretic, antihypertensive, cholesterol lowering, antioxidant and antidiabetic activities.

The majority of these plants are seasonal and only available during certain times of year. The remaining plants, which are perennial and available throughout the year, are also used in a specific month of the year since the plant part used in diet is only available for a few months. Many plants have been utilised for two purposes: food and medicine. Most tribal societies are well-versed in the edible plants found in the surrounding forest, and they understand how to eat the edible sections while discarding the rest. This oral custom of consuming wild herbs must be preserved for future generations. Thus, wild edible plants can operate as a link between habitat, season of availability, local people, and tribal culture.

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III. CONCLUSION

The current study's final result is that there are several plants available in the Sindhudurg district forest that might be used as an alternative cuisine with medicinal and nutritional value. However, there are few scientific investigations on these plants, particularly their nutrient and anti-nutrient content. As a result, it is critical to conduct a thorough nutritional and cultivation analysis of some promising plants. It has also been observed that traditional knowledge of wild foods is rapidly diminishing as a result of increased deforestation and our educational system. It does not place an emphasis on conventional knowledge that is embedded in our social and cultural systems.

REFERENCES

- [1]. Reddy (2012). Wild edible plants of Chandrapur district, Maharashtra, India; Indian Journal of Natural Products and Resources, Vol. 3(1) 110- 117.
- [2]. Bhogaonkar P., Marathe V., Khsirsagar P. (2010). Documentation of Wild Edible Plants of Melghat Forest, Dist. Amravati, Maharashtra State, India, Ethnobotanical Leaflets 14 (7) 51-58.
- [3]. Chothe A., Patil S., Kulkarni D (2014). Unconventional wild fruits and processing in tribal area of Jawhar, Thane District, Bioscience Discovery, 5(1) 19-23.
- [4]. Nene Y. L. (2004). Plant species utilized as food during famines and their relevance today, Asian AgriHistory, (8) 267-278.
- [5]. D'souza (1999). The ethical principles followed by vaidus, Indian Journal of Medical Ethics, Vol 7 (1).
- [6]. Palekar (1993), Ethno – Medical Traditions of Thakur Tribals of Karjat, Maharashtra, Ancient Science of Life, Vol. No. XIV (3 & 4) 388 – 393.
- [7]. Dhore, Lachure, Bharsakale, Dabhadkar (2012). Exploration of Some Wild Edible Plants of Digras Tahsil, Dist. - Yavatmal, Maharashtra, India, International Journal of Scientific and Research Publications, 2 (5).
- [8]. Yesodharan K. and Sujana K. (2007). Wild edible plants traditionally used by the tribes in the Parambikulam Wildlife Sanctuary, Kerala, India, Natural Product Radiance, Vol 6 (1).
- [9]. Oak G., Kurve P., Kurve S., Pejavar M. (2015). Ethno-botanical studies of edible plants used by tribal women of Thane District, Journal of Medicinal Plants Studies; 3(2) 90-94.
- [10]. Deshmukh B. and Waghmode A. (2011). Role of wild edible fruits as a food resource: Traditional knowledge; International Journal of Pharmaceutical & Life Sciences, 2 (7) 919-924.
- [11]. WIPO (Undated). Retrieved from <http://www.wipo.int/tk/en/tk/>.
- [12]. Nimbekar TP, Katolkar PP, Wanjari BE, Nema MV, Patil AT. (2011). Traditional knowledge of medicinal plants of Gondia district in Maharashtra state: An ethno-botanical survey. International Journal of Herbal Medicine and Toxicology. 5(2):9-17.
- [13]. Sawarkar PU, Kulkarni DK. (2015). Wild food Resources of Tadoba-Andhari Tiger Reserve in Chandrapur district of Maharashtra, India Indian Journal of Fundamental and applied life sciences. 5(4):76-83.