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TRADITIONAL USES OF SOME WILD EDIBLE PLANTS FROM KOLHAPUR DISTRICT

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ABSTRACT:

The wild plants play an important role in human life, because they have dual significance; they are used as a medicine as well as they have food values. Total 50 plant species have been selected for present investigation. Out of them 18 plants are used as a leafy vegetables; fruits of 21 plants are edible and three tuberous rhizome of *Nymphaea nouchali*, *Nymphaea pubescence*, *Leea indica* & *Teramnus labialis* are having good edible value. Flowers of *Amorphophallus commutatus*, *Holosemma annulare*, *Madhuca longifolia* & *Dioscoria pentaphylla* are used as a vegetable. All 50 plants documented along with their medicinal uses and food values.

KEY WORD: *Wild edible plants, Ethanobotany.*

INTRODUCTION:

Wild plants make an important contribution to the life of rural communities. Wild edible plants are those with one or more parts that can be used for food, if gathered at the appropriate stage of growth and properly prepared. The tradition of eating wild plants has not completely disappeared from India and their nutritional role for health benefit being reported in many surveys ([Vartak V.D.1980](#), [Vartak and Gadgil, 1980](#)). Rural peoples fulfill their nutritional requirement from wild resources. They got knowledge of wild edible plants traditionally. This traditional knowledge is useful to develop new food sources. Documentation of traditional knowledge of wild edible plants along with their ethnomedicinal uses is essential for conservation. Wild edible plants play a significant role in meeting requirement of local people in remote part of country ([Sundriyal and Sundrial, 2001](#)). There are several wild edible plants that are consumed by local people in several forms such as roots, tubers, leaves, flowers, fruits and seeds etc. Wild edible plants are nutritionally rich

than the some cultivated species ([Burlingame, 2002](#)).For many centuries local people had self-develop traditional remedies for treatment of diseases. Kolhapur is a city situated in the south-west corner of Maharashtra, India, at 16.41°N 74.13°E. It has an elevation of 569 metres (1867 ft). Kolhapur the extreme southern district of Maharashtra state, situated between 17°, 17' to 15°, 43' north latitude and 73°, 40' to 74°, 42', east longitude entirely in the Panchganga basin encompassing an area of about 7685 sq. kms. (Banthia, 1995-96). As stated in above graph it has various localities which are rich in flora and fauna ([Yadav & Sardesai, 2002](#)).

METHODS:

The ethanobotanical survey were carried out in rural areas of Kolhapur district from June 2010 to December 2012. The data occurred through discussions and interviews with experienced persons and traditional healers. The data on wild edible plants were collected using preparation of questionnaire in local language and group discussions. Voucher specimens were collected during walk with informants. The collected plants were identified by using standard floras ([Hooker, 1872 – 1877](#); [Cooke, 1967](#); [Singh and Karthikeyan 2000](#), [Singh et al. 2001](#), [Yadav and Sardesai, 2002](#)).

RESULTS AND DISCUSSIONS:

The study area is floristically rich and includes various useful wild edible plants. Some wild plants having dual significance food values as well as medicinal value in rural areas ([Etkin, 2002](#); [Dhillon and Shrestha, 2005](#)). In present study total 50 plants have been selected from the district some of which leaves, flowers, fruits, stem, inflorescence, tubers and bulbils are mainly used for consumption. All 50 wild edible plants were collected and stored with detailed information regarding scientific name, common name, purpose of uses for future reference and results depicted in (Table 1). Out of which 14 species belongs to herbs, 15 species belongs to trees, 14 belong to shrub and 7 are climbers.

Recently from vidharba (Chandrapur) [B Mallesh Reddy](#) (2012) reported 61 wild edible plants of which some leafy vegetable, fruits, tubers etc. [Kshirsagar et al](#) (2012) studied wild edible plants of Buldhana district they have reported 56 wild plant species, along with 12 wild plants sold in local market. [Patil and Patil \(2000\)](#) reported 36 wild edible plants of which fruits of 7 plants are edible, 13 plants used as a leafy vegetables and tubers and rhizomes of some plants are edible.

CONCLUSION:

Ethanobotanical research is to way to understand the future of human relationship with this land and it is useful in the identification of new drug and food resources. Wild edible plants represent inexpensive, locally available and versatile good sources capable of improving nutrition and health quality ([Binu](#)

2010). Similar survey made by various authors in different localities ([Bhogaonkar et al 2010](#), [Dhore et al 2012](#), [Ahirrao et al 2009](#)). Present work documented 50 wild edible plant species and gives us information on food habits of rural people of Kolhapur district. Out of these most of the plants have medicinal values. Further investigation on their phytochemical and Nutraceutical studies may provide better nutritional and medicinal sources for future.

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Table -1 Documented wild edible plants.

Sr. no.	Name of plant specie	Family	Vernacular name	Edible plant part	Medicinal use
Edible plant part fruit					
1	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Chota Karmal	Fruits are edible.	The juice of the fruit mixed with sugar and used as a cooling in fevers and as a cough mixture.
2	<i>Capparis zeylanica</i> L.	Capparaceae	Wagati	Fruit used as vegetable.	The juice of fresh fruit is dropped into the ear to kill worms.
3	<i>Mamea suriga</i> (Buch. Ham. ex Roxb) Koest.	Clusiaceae	Nagchapha	Fruit delicious and edible.	The root bark and leaves are local anesthetic and applied to painful swellings.
4	<i>Garuga pinnata</i> Roxb	Burseraceae	Kakad, Kudak	Fruits edible used in pickles.	The fruit pickle is eaten as cooling and stomachic.
5	<i>Grewia asiatica</i> L.	Tiliaceae	Phalsa	Fruits acidic and edible.	Fruit sharbat is having astringent and cooling effect.
6	<i>Meyna laxiflora</i> Robyns.	Rubiaceae	Alu	Fruits are edible.	Decoction of fruit is useful in biliary complaint with hepatic congestion.
7	<i>Oroxylum indicum</i> (L. Vent.	Bignoniaceae	Tetu	Young pod used as a vegetable.	Young fruits are used as an carminative and stomachic.
8	<i>Elaeagnus conferta</i> Roxb.	Elaeagnaceae	Ambgul, Nurgi	Fruits are edible.	Fruit used as astringent. Fruit

					gives relief after the effect of alcohol.
9	<i>Bridelia scandens</i> (Roxb.) Willd.	Euphorbiaceae	Asan	Fruits are edible.	Stem bark paste applied externally for skin diseases.
10	<i>Solanum nigrum</i> L.	Solanaceae	Kamuni	Fruits are edible.	Decoction of fruits and flowers are useful in cough and consumption.
11	<i>Spondias indica</i> (Wt. & Arn.) Airy Shaw & Forman.	Anacardiaceae	Ambada, Ranambada.	Fruits edible and made in to pickles.	Fruit of pulp is acidic and astringent and useful in bilious dyspepsia.
12	<i>Flacourtia latifolia</i> (Hook.f.Thoms) Cook	Flacourtiaceae	Tambat	Berries edible.	Juice of fruit is useful in fever.
13	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Tondali	Fruit used as vegetable.	Young fruit eaten as a row for mouth diseases.
14	<i>Radermachera xylocarpa</i> (Roxb.) K. Schum.	Bignoniaceae	Medshingi	Young fruits used as a vegetable.	Fruit powder is applied externally for skin diseases.
15	<i>Solanum anguivi</i> Lam	Solanaceae	Dorli, Mothi ringani.	Fruits are edible.	Decoction of fruit one cup in day is useful in dry cough.
16	<i>Alangium salvifolium</i> (L.F.) Wang var <i>salvifolium</i>	Alangiaceae	Ankol.	Fruits are edible.	Fruit paste is applied externally for burning of the body.
17	<i>Careya arborea</i> Roxb	Lecythidaceae	Kumbha	Seeds are edible. Fruit pickle is edible.	Fruit decoction is used to promote digestion.
18	<i>Glycosmis pentaphylla</i> (Retz.) Dc.	Rutaceae	Kirmira	Ripe fruit edible.	Fruit powder is useful to cure fever.
19	<i>Murraya paniculata</i> (L.) Jack.	Rutaceae	Kunti	Fruits are edible.	Leaves powder is aromatic, refrigerant, digestive and beneficial in rheumatic fever.
20	<i>Bridelia retusa</i> (L.) Spreng	Euphorbiaceae	Asana	Ripe drupes are eaten.	Stem bark powder applied externally for skin diseases.
21	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Ulmaceae	Vavli	Seeds are edible.	Stem bark juice is applied externally for rheumatic swelling.
Edible plant part-Stem and petiole.					
22	<i>Begonia crenata</i> Drynad.	Begoniaceae		Stems & petiole edible.	Juice of whole plant gives orally for acidity and ulcer.
Edible plant part-Flower					

23	<i>Amorphophallus commutatus</i> (Schott) Engl.	Araceae	Sheval	The peduncle and inflorescence are edible.	Tubers are used in boils and ophthalmia.
24	<i>Holosemma annulare</i> (Roxb.) K.Schum.	Asclepiadaceae	Shidodi	Flowers and fruit eaten by local people.	Root paste gives orally with cold milk in diabetes.
25	<i>Madhuca longifolia</i> (Koen.) Macbr. var. <i>latifolia</i> (Roxb.) Chevalier.	Sapotaceae	Moha	Flowers and fleshy pericarp are edible.	The sweet juice from petals is good tonic for health.
26	<i>Dioscoria pentaphylla</i> L.	Dioscoriaceae	Shendvel	Inflorescence used as vegetables.	Inflorescence useful in bile, burning, phlegm and eye diseases.

Edible plant part-Leaves

27	<i>Amaranthus viridis</i> L.	Amaranthaceae	Math.	Leaves used as a vegetable.	Leaf paste pest externally as a antidote.
28	<i>Embelia drupacea</i> (Dennst.) M.R. & S.M	Myrsinaceae	Ambati	Tender leaves used as a vegetable.	Bark of root is used in toothache.
29	<i>Tamarindus indica</i> L.	Fabaceae	Chinch, Imali.	Young leaves and fruits are edible also used in spices.	The ripe fruit is useful in constipation. The pulp of ripe fruit and poultice of the leaves are applied externally for inflammatory swellings to relieve pain. Leaf juice is given internally for bleeding piles.
30	<i>Commelina benghalensis</i> L.	Commelinaceae	Kena	Leaves used as vegetable.	Leaf powder mix with warm water and gives orally to treat diarrhea.
31	<i>Oxalis corniculata</i> L.	Oxalidaceae	Ambushi	Leaves and seeds are edible.	Leaves are useful in fevers and biliousness.
32	<i>Embelia drupacea</i> (Dennst.) M.R. & S.M	Myrsinaceae	Ambati	Tender leaves used as a vegetable.	Decoction of leaves gives orally for sore-throat.
33	<i>Hibiscus sabdariffa</i> L.	Malvaceae	Lal-ambadi	Leaves used as a vegetable.	Leaves used as emollient.
34	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Reshim-kata	Leaves used as a vegetable.	Leaf juice used in eye diseases.
35	<i>Smilax zeylanica</i> L.	Smilacaceae	Gotvel	Tender leaves used as a	Leaves powder used in rheumatism.

				vegetable.	
36	<i>Abrus precatorious</i> L	Fabaceae	Gunj	Leaves edible.	Leaf juice mixed with castor oil and applied externally for burning of skin.
37	<i>Ipomoea nil</i> (L.) Roth	Convolvulaceae	Nalichi-bhaji	Leaves used as a vegetable.	Leaf pest is applied externally for piles.
38	<i>Rivea hypocrateriformis</i> (Desr.) Choisy	Convolvulaceae	Phanji	Leaves is edible.	Leaf paste made with camphor and butter it is used as ointment.
39	<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	Aghada	Leaves used as a vegetable.	Tender shoots and leaves are used locally for snake bite.
40	<i>Cardiospermum helicacabum</i> L.	Sapindaceae	Kapal Phodi	Leaves eaten as a vegetable.	Decoction of leaves and root is given orally for rheumatism and piles.
41	<i>Hydrolea zeylanica</i> (L.) Vahl.	Hydrophyllaceae	Keriti	Tender leaves are edible and used in curries.	Leaf paste applied as a poultice.
42	<i>Pedaliium murex</i> L.	Pedaliaceae	Motha-gokharu.	Leaves eaten as a vegetable.	Powder of leaves given with milk in gonorrhoea.
43	<i>Phyla nodiflora</i> (L.) Greene .	Verbenaceae	Mundi	Leaves are edible.	Decoction of leaf is given for cooling effect.
44	<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Kadipatta	Leaves used in curries.	Tender leaves are eaten raw for cure dysentery.
Edible plant part-Whole plant					
45	<i>Caralluma adscendens</i> var. <i>fimbriata</i> (Wall.) Grav. & Mayur.	Asclepiadaceae	Makad shing, Shingoli	Entire plant is edible.	Plant powder used as anti-inflammatory.
46	<i>Colocasia esculenta</i> (L.) Schtt.	Araceae	Alu	All parts of plants are edible.(Except flower)	Leaf juice of petiole is dropped into ears of children in otorrhoea. Tubers made hot and locally applied to painful parts in rheumatism.
Edible plant part-Rhizomes & tuber					
47	<i>Teramnus labialis</i> (L.f.) Spreng.	Fabaceae	Ranudid	Tuber is edible.	Tuber paste is useful for curing fever.
48	<i>Nymphaea nouchali</i> Burm.f.	Nymphaeaceae	Kamal	Tuberous rhizomes and peduncles eaten	Raw tubers are used as emetic and it beneficial in pitta.

