

# Dietary and Ethno Medicinal Use of Wild Vegetables from Wardha District, Maharashtra, India

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**Abstract** - The present inventory was carried out in the year 2016-2017. While collecting information regarding medicinal plants, the valuable information about vegetable use of plants noted and presented in this paper. A total of 28 wild vegetables were surveyed using a schedule to assess the knowledge, availability and consumption pattern of wild leafy vegetables. The diversity of wild leafy vegetables being use by the local inhabitants is 28 species belonging to 25 genera and 17 families. The majority of wild plants were herb, shrubs and trees. The majority of the wild vegetable plants used by local inhabitants in the study area were collected raw from the forest and not cultivated ones. The study indicated that the knowledge is to be transferred properly by old people to younger generation and should be trained in collection and processing. Here, 26 plant species from dicot and 02 from monocot were studied.

**Index Terms** - Dietary Use, Ethno-botany, Wardha District, Wild Vegetables.

Consumption of green vegetables is chief source of vitamin and micronutrients for those who are vegetarian. Knowledge of these edible plants is part of their traditional knowledge which is usually transmitted by elders to young ones and also by participation of individuals in collection of vegetable plants. Availability observations were done using regular visits with informants. Use of plants for one or other purpose is done by the human societies since very long period While, hunter-gatherer societies still continue to profess such lifestyles, the agricultural societies did not eliminate the use of non-cultivated resources. Now a days, human vegetables consumption is based on rather very limited number of crops (12-15species) but many part of the world the use of wild plants is very common (Bussman & Sharon, 2006; Kunwar et al., 2006; Cavender, 2006; Pieroni et al., 2007).

## INTRODUCTION

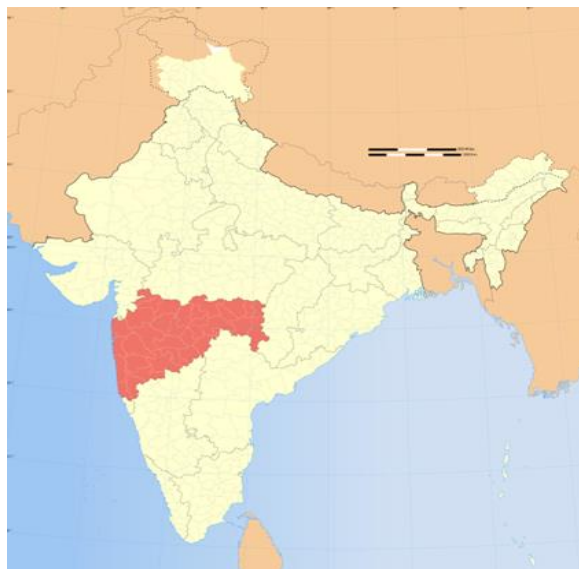
There is no culture on the earth that has not made use of plants for their physical, emotional and spiritual needs of the human life. Plants form an integral part of any society, any time. Use of plants as food, clothes, fodder, medicine, timber, etc. by man is since time immemorial. In remote rural societies where vegetable cultivation is not practiced and market is not available for local inhabitants, they should be dependent on locally available plants those can be used as vegetables. Ethnic people from various tribes have been started domesticating wild edible and useful plants by trial-and-error method. That was the base of modern agricultural practices and related research (Prescott & Prescott, 1990; Scherrer et al., 2005 and Bussmann et al., 2006).

## STUDY AREA

The District of Wardha is in Maharashtra State situated between 20° 44' 21.59' North Latitude and 78° 35' 52.22' East Longitude. The district has a total area of 6,310 Km<sup>2</sup>; 89 Km<sup>2</sup> is Urban and 6220 Km<sup>2</sup> is rural area and population of 1,300, 774 out of which 668, 385 are male and 632, 389 are female according to 2011 Census. There are 13 towns' and 1376 villages in this district.

Map.1. India showing Maharashtra state.

Map.2. Vidharbha District showing tehsils.



### METHODOLOGY

Major wild vegetable survey of the area was conducted during the month of May 2016 to April 2017. During these surveys data on wild uses of the plants used by people, the diversity of wild food plants available for use was documented. Informant discussion, interviews and villages walks with the informants; medicine man were held to enhance understanding and gather information about different species of wild vegetables plants available around the villages and in cultivated areas. A questionnaire was used to collect information on personal data,

traditional knowledge about each species used by the housewives. Adult female member from the house, who is responsible for vegetable preparation, was considered as the respondent with additional information from children and men those assisting in collection and processing of wild leafy vegetables and fruits. Field visits were made with the informants for collection of plant specimens (Jain, 1991). Identification of the collected specimens was made with the help of standard Floras like Hooker, (1872-1897), 'Flora of British India' (Vol. I-VII); Crooke (1901-1908); 'Floras of Presidency of Bombay'; Ugemuge, (1986); 'Flora of Nagpur District' and Acharya, (1984), Flora of Wardha district'. Herbarium specimens were deposited in the Department of Botany R. S. Bidkar College, Hinganghat, Dist. Wardha (Maharashtra). Botanical survey of India, Pune was also consulted for identification and confirmation of identification of the specimens. During the visits to each, the author personally accompanied the informant to the fields to document the processing and preparation.

### OBSERVATION AND RESULT

(1) Botanical Name : *Achyranthes aspera* L.  
 Family : Amaranthaceae.  
 Local Name : Aghada and Kutra.  
 Dietary Use : Young leaves are used as vegetables.  
 Ethnomedicinal Uses : Leaf juices are given orally for urinary tract irritation. Root powder decoction is given orally to dissolve kidney stone; Root is abortifacient, astringent and diuretic. Root and leaf is laxative, antidote, anti-dysenteric, anthelmintic, antiseptic, stomachic, skin diseases and piles.

(2) Botanical Name : *Aegeratum conyzoides* L.  
 Family : Asteraceae.  
 Local Name : Gandhari.  
 Dietary Use : Salad of young leaves with *Ocimum* leaves and Black pepper are used as vegetables  
 Ethnomedicinal Uses: The entire plant are used to treat colic, cold, fevers, diarrhoea, rheumatism and as a tonic. It is also used for burns and wounds. The plant is widely used for antibacterial properties, to treat fever, rheumatism, headaches, pneumonia wounds and burns.

(3) Botanical Name : *Alocasia indica* (L.) Schott.

Family : Araceae.

Vernacular Name: Kansalu, Bramharakshas and MothaDhopa.

Dietary Use : Rhizome are eaten as vegetables, leaf are used as vegetable along with *Cicer arietinum* L.. The rhizome is used after cutting them into small pieces and boiled in water with Tamarind and salt. This reduces the itching sensation while eating. In case of leaf washed and dry, keep the solution of flour of *Cicer arietinum* L. and steaming with water and then cooked as vegetables.

Ethnobotanical Uses: Leaves and Rhizome powder used to cure piles and fistula. Leaves are anthelmintic and anti-inflammatory.

(4) Botanical Name : *Amaranthus spinosus* L.

Family : Amaranthaceae.

Vernacular Name: Kathemath, Rajgira

Dietary Use : Leaves are used as vegetables.

Ethnobotanical Uses : Seed nutritious, Laddu prepared from seeds are given in calcium deficiency and in general debility. Tea made from the leaves is astringent. It is used in the treatment of intestinal bleeding, diarrhoea and excessive menstruation. The root is emmenagogue and galactagogue. The paste of the root is used in the treatment of menorrhagia, gonorrhoea, eczema and colic. It helps to remove pus from boils.

(5) Botanical Name : *Bauhinia purpurea* Willd.

Family : Caesalpiniaceae.

Vernacular Name: Apta.

Dietary Use : Tender leaves and flower buds are used as vegetables.

Ethnobotanical Uses : The roots are astringent, constipating, anthelmintic, anti-inflammatory and carminative. It is useful in skin diseases, leprosy, intestinal worms, wounds, ulcers, cough, diabetes, piles, dyspepsia and flatulence. It is also used to as antidote to poison. The leaves and buds are edible.

(6) Botanical Name : *Capparis deciduas* (Forsk.) Edgew.

Family : Capparidaceae.

Vernacular Name: Kartoli.

Dietary Use : Fruits are used to prepare prickles. Fruits cut into pieces and boil for 10 minutes then used as vegetables.

Ethnobotanical Uses : Root bark is Astringent, Laxative and stimulants; seeds are antibacterial.

(7) Botanical Name : *Cassia fistula* L.

Family : Caesalpiniaceae.

Vernacular Name: Bahava.

Dietary Use : Inflorescence and flower are used as vegetables.

Ethnobotanical Uses : Roots are astringent, purgative, laxative, febrifuge and tonic. It is useful in skin diseases, syphilis and burning sensation. It is also used in leucoderma, diabetes and dysuria. The bark is laxative, anthelmintic, emetic, antidysentric, febrifuge, and diuretic, depurative, expectorant, antibacterial and purgative. Stem extract is used on bronchitis and pneumonia. The leaves are used in skin diseases, leprosy, ulcers and intermittent fever. The flower and fruits are useful in skin diseases, rheumatism, jaundice, liver tonic and in general debility.

(8) Botanical Name : *Cassia tora* L.

Family : Caesalpiniaceae.

Vernacular Name: Tarota.

Dietary Use : Young leaves plucked immediately after germination and used as vegetables.

Ethnobotanical Uses : Paste of the leaves applied over skin infections. The leaves and seeds are acrid, laxative, antiperiodic, anthelmintic, ophthalmic, liver tonic and expectorant. The leaves and seeds are useful in leprosy, ringworm, flatulence, constipation, cough, bronchitis and cardiac disorder.

(9) Botanical Name : *Celosia argentea* L.

Family : Amaranthaceae.

Vernacular Name: Kombda.

Dietary Use : Tender leaves before flowering used as vegetables.

Ethnobotanical Uses : Young leaf paste given to induce deep sleep. Root powder decoction given in urinary troubles. Plants are aphrodisiac, digestive, antidiarrhoeal, ophthalmic and are used in urinary stones, impotency, and diarrhoea and eye diseases.

(10) Botanical Name : *Colocasia esculenta* (L.) Schott.

Family : Araceae.  
 Vernacular Name: Alu.  
 Dietary Use : Tender leaves are used as vegetables. The leaves and petioles after cutting them into small pieces put in boiling water with Tamarind. This reduces itching sensation while eating.  
 Ethnobotanical Uses : Leaf juice applied over scorpion sting or snake bite. It is also used in food poisoning of plant origin. Corms and tender leaves are used as staple food in some parts of India.

(11) Botanical Name : *Ficus racemosa* L.  
 Family : Moraceae.  
 Vernacular Name: Umbar.  
 Dietary Use : Young fruit or inflorescence used as vegetables and ripe fruit are edible.  
 Ethnobotanical Uses : Inflorescence or young fruits were cut into desirable size of pieces and prepare with little amount of Lemmon juice. It reduces stickiness due to latex. Roots are used for dysentery, diabetes, abortifacient if given with *Achyranthes aspera* L. The bark is useful for ulcers, skin diseases, vaginal disorders, abortion, gonorrhoea, urinary diseases to induce fertility, snake bites, asthma and promote fair complexion. The unripe fruits are useful in diarrhoea and dyspepsia. Ripe fruit are used in haemoptysis, thirst, vomiting, diabetes and urinary complaints. Latex is given orally for impotency.

(12) Botanical Name : *Momordica dioca* Roxb.ex Willd.  
 Family : Cucurbitaceae.  
 Vernacular Name: Katwal.  
 Dietary Use : Fruits is used as vegetables.  
 Ethnobotanical Uses : Tubers roots are used in bleeding piles, Fruits are diuretics, stomachic, antivenum property. It is also used to cure asthma, leprosy, excessive salivation, prevent the inflammation caused by lizard, snake bite, fever, mental disorders and digestive disorders. Fresh fruit juice is prescribed for hypertension. The fruit is cooked in small amounts of oil and consumed for treating diabetes. Tender fruits are rubbed on skin for pimples and acne. Seeds are roasted and taken for eczema and other skin diseases. Leaves are anthelmintic and aphrodisiac. Juice of the leaves mixed with coconut, red sandalwood in order to form an

ointment and applied to the head to relive pain in the head. Leaf paste applied externally to skin and orally two or three times daily for skin diseases. Juice of root is stimulant, astringent and antiseptic. The root of the plant is also recommended for Scorpion sting.

(13) Botanical Name : *Oxalis corniculata* L.  
 Family : Oxalidaceae.  
 Vernacular Name: Amboti.  
 Dietary Use : Leaves are used as vegetables also used as one of the essential members of green salad.  
 Ethnobotanical Uses : The juice of the plant is given in stomach trouble; decoction of roots is useful for worms the extract of plant is applied in case of scorpion sting. Fresh leaves are crushed and are used to bleeding from wounds. The raw fresh leaves are crushed and directly applied on skin to treat eczema. Ground leaves are eaten as chutney that's acts as blood purifier. It is also used for giddiness, diarrhoea and dysentery. Juice of the leaves applied to open wounds relives pain, paste of ground leaves and raw onions applied to forehead for intense headache. Leaf decoction is used in treating cough, dysentery and astringents.

(14) Botanical Name : *Portulaca oleracea* L.  
 Family : Portulacaceae.  
 Vernacular Name: Gholbhaji.  
 Dietary Use : Tender shoots and leaves are used in vegetables preparation.  
 Ethnobotanical Uses : Leaf is used in bleeding piles and leaf paste massaged over bleeding gums. Whole plant is used in treatments of internal parasites. The fresh herb may also be applied topically to relieve sores and insects or snake bites on the skin.

(15) Botanical Name : *Solanum nigrum* L.  
 Family : Solanaceae.  
 Vernacular Name: Kamoni.  
 Dietary Use : Leaves and fruits are used as vegetables.  
 Ethnobotanical Uses : Leaf juice taken orally for urinary problems. The leaf juice alone or mixed with other juices or liquids. It is used in stomach disorders like flatulence. An infusion of the plant is useful in dysentery and other stomach ailments. Green fruit of the plant can be ground and applied locally on ringworms. A juice or poultice of the leaves is an

efficacious application over rheumatic and gouty joints corrosive ulcers and tumours.

(16) Botanical Name : *Sesbania grandiflora* (L.) Pers.

Family : Fabaceae.

Vernacular Name: Heti, Agastha.

Dietary Use : Flowers are used as vegetables and also made bhaje with flour of *Cicer aeritinum* L.

Ethnobotanical Uses : Flowers are used in rheumatism, emmenagogue, febrifuge, laxative and tonic. The juice of the flowers are used is used to treat headache, head congestion and stuffy nose. The juice of the leaves used for headache and nasal catarrh. In Amboina, flowers juice is squeezed into the eye to correct dim vision. The bark is used in infusion for small pox. In small doses, the bark is used for dysentery and spruce in large doses, laxative, in still large doses emetic. Powder bark applied scabies. They gargle with the leaf juice to cleanse the mouth and throat. The leaves are chewed to disinfect the mouth and throat.

(17) Botanical Name : *Momordica charantia* L.

Family : Cucurbitaceae.

Vernacular Name: Karle.

Dietary Use : Fruits are used as vegetables.

Ethnobotanical Uses : Wash the bitter melon leaves and crush them and add 6 table spoons of chopped leaves in two glass of water. Boil it approximately for 10 minutes in an uncovered pot. Allow it to cool and then strain drink one third cup of it thrice a day to treat diabetes. The juice of the bitter melon is excellent remedy for hangovers to prevent liver damage. Three teaspoon of juice of bitter melon leaves is to be extracted each morning added to a glassful of butter milk and then consumed in an empty stomach regularly for 30 days to cure piles completely. Even externally the paste of the leaves can be applied over the haemorrhoids. In case of scabies, ringworm and psoriasis one cup of bitter melon juice must be taken each morning on an empty stomach.

(18) Botanical Name : *Cucurbita maxima* Duchesne.

Family : Cucurbitaceae.

Vernacular Name: Lalbhopla.

Dietary Use : Fruits are used as vegetables. Fruits are boiled and made paste mixed with wheat flour and preparing Sweet Bhajiya.

Ethnobotanical Uses : Leaves are used for strengthening the digestive system and as antiscorbutic. Paste of the leaves is used in biliousness and burning sensation. Paste of the leaves is used externally on burns, bed wetting, rheumatism and wound. Fruit juice obtained from fresh fruit of the plant and mixed with rose extract is used as eardrops for removing otitis. Fruit is boiled in water and served with salt and Black pepper and its decoction is used to cure intestinal disorders and gastric problems. Seeds are used in urination problems for curing bladder disorders and works as anthelmintic agent. Seeds are used in treatments of whooping cough in small children, anaemia, malnutrition, constipation and it increases the milk lactation in nursing mother. Pulp is used against tapeworms in children and in pregnant women. Whole plant is useful for suffering from bronchial asthma, cough and oedema. The seeds are ground into fine powder and then made into an emulsion with water and eaten to treat vermifuge.

(19) Botanical Name : *Coccinia indica* Wight and Arn.

Family : Cucurbitaceae.

Vernacular Name: Tondali.

Dietary Use : Fruits are used as vegetables.

Ethnobotanical Uses : The juice from the stem is dripped into the eyes to treat cataracts. Leaf is used as poultice in treating skin eruptions. The root is used for treating vomiting. Fruit extract is used for reducing inflammation. The aqueous extract of the leaves is used for the antibacterial activity.

(20) Botanical Name : *Eugenia jambolana* Lam.

Family : Myrtaceae.

Vernacular Name: Jambhul.

Dietary Use : The fruits are edible.

Ethnobotanical Uses : Infusion of fruit or mixture of powder bark and fruit is given orally to treat diabetes. Juice obtained from the seeds is applied externally on sores and ulcers. Powder seeds are mixed with sugar and given orally 2-3 times daily in the treatments of dysentery. Both the seeds and fruits are diuretic; carminative and have astringent

properties. The juice of the bark is astringent and is for treating wounds and enlargement of the spleen. The bark is used as gargle to strengthen the gums and to treat mouth ulcers. An infusion of the leaves is used in the treatments of diabetes and diarrhoea. The roots are used in the treatments of epilepsy. For beauty and fair skin- crush the seeds and mix cow milk to it and apply the paste before going to bed and wash it in the morning. In the problems on oily skin – mix of Jamun pulp, barley flour, Amala juice and Rose water. Use this mixture as face mask and wash when it gets dry. Bark, Seed, Leaves and Fruits are used as astringents.

(21) Botanical Name : *Tamarindus indica* L.

Family : Fabaceae.

Vernacular Name: Chinch.

Dietary Use : The fruits are used as preparing curry and used in vegetables.

Ethnobotanical Uses : Leaves and pulp crushed and applied on swollen joints provide get relief from inflammation. Decoction of leaves is used against throat infection, cough, fevers and intestinal worms. The leaves are warmed and powder tied to affected area in order to relieve swelling and pains. The flesh of the fruit is used against digestive problems, cough, chest cold and fevers. Powder seeds may be given to cure dysentery and diarrhoea. Milk from seeds is used for bleeding piles.

(22) Botanical Name : *Pithecellobium dulce* L.

Family : Mimosaceae.

Vernacular Name: Chichbil.

Dietary Use : Ripe fruit are used as eating purpose.

Ethnobotanical Uses : A paste made from the leaves is applied externally to treat muscular swelling caused by some inflammation. The leaves together with salt can cure indigestion but in larger doses can also induce abortion. The bark of the root is a good remedy for diarrhoea and dysentery. Fruit peel is used for antibacterial, antioxidant and wound healing potential. Bark of the plant soaked in a cup of water at least 12 Hrs. and taken early in the morning in empty stomach is supposed to cure chickenpox, virus attacks and measles.

(23) Botanical Name : *Moringa oleifera* Lam.

Family : Moringaceae.

Vernacular Name: Shevga or Mungana sheng.

Dietary Use : Leaves and fruit are used as vegetable.

Ethnobotanical Uses : The gums are abortifacient, astringent and diuretic. Preparation of brew by boiling Moringa flower in water is good to cure cold and enhances the sperm production in men. Poultice of fresh leaves is applied on shallow cut to stop the bleeding. Moringa flower juice generally improves the flow and quality of the milk of a breast feeding mothers and treat urinary problems. Fresh leaves of *Moringa oleifera* Lam., salts, Black pepper, *Allium sativum* L., *Curcuma longa* L. are mixed together and given internally as well as applied on the bites of mad animals, wolf, cat and dog. Root extract and milk are given for the inflammation of the neck.

(24) Botanical Name : *Semecarpus anacardium* L.f

Family : Anacardiaceae.

Vernacular Name: Bibha.

Dietary Use : The part of the seed called Godambi used as a dry fruit.

Ethnobotanical Uses : Ripe fruit are aphrodisiac, digestive and stimulant. Paste of the seeds is applied externally in the treatment of ringworm and severely chapped feet. The juice of the root is considered to be effective in causing sterility in women. The latex is applied externally in the treatment of headaches, skin diseases and scabies.

(25) Botanical Name : *Mangifera indica* L.

Family : Anacardiaceae.

Vernacular Name: Amba.

Dietary Use : Fruits eaten ripen or in unripe form

Ethnobotanical Uses : Unripe fruit is boiled in water to prepare decoction and is consumed to cool the body and heat stroke endocarp of the fruit is used to treat anthelmintic and bleeding piles. Fumes from the burning leaves are inhaled for relief from hi cough and infection of the throat. The gargle made from the leaves is effective in hardening the gums and to treat dental problems. The seed is roasted is treated as astringent, antidiarrheal and anthelmintic. Gum is heated and applied locally to treat cracks of soles. The tender stem is warmed in slow flame and the oozing foam like juice is put to cut, wounds and cracks of the heals.

(26) Botanical Name : Ziziphus oenoplia (L.) Mill.  
 Family : Rhamnaceae.  
 Vernacular Name: Yeruni.  
 Dietary Use : Fruits are edible.  
 Ethnobotanical Uses : Sputum of chewed leaves is used for dressing of wounds. Stem bark is used as a mouthwash for sore throats, for dysentery and for inflammation of the Uterus. The roots are used as anthelmintic. The roots are used for the treatments of epilepsy. Fruits are used in stomach ache.

(27) Botanical Name : Cissus quadrangularis L.  
 Family : Vitaceae.  
 Vernacular Name: Hadjod.  
 Dietary Use : The stem and leaves are feed to livestock's to stimulate lactation.  
 Ethnobotanical Uses : The roots and stem are most useful for healing of fracture of the bones. Juice from the stem is applied for rheumatism and to ease the pain of broken bones and hasten recovery. Powdered roots are also used in the treatment of fracture bones as well as indigestion.

(28) Botanical Name : Ziziphus jujubaMill.  
 Family : Rhamnaceae.  
 Vernacular Name: Bor.  
 Dietary Use : Fruits are edible.  
 Ethnobotanical Uses : Fruits improve muscular strength and weight; prevent liver and bladder diseases, stress and Ulcers. The fruit in powdered form and consumed as Borkut. Dried bark powdered is also used to treat wounds. Decoction of root is used to treatment of diarrhoea and dysentery.

Family wise distribution of plant species:

Sr. No.	Families	No of plant species
1	Fabaceae	02
2	Cucurbitaceae	04
3	Amaranthaceae	03
4	Caesalpiniaceae	03
5	Araceae	02
6	Myrtaceae	01
7	Anacardiaceae	02
8	Rhamnaceae	02
9	Oxalidaceae	01
10	Portulacaceae	01
11	Solanaceae	01
12	Asteraceae	01

13	Mimosaceae	01
14	Moringaceae	01
15	Capparidaceae	01
16	Moraceae	01
17	Vitaceae	01

Parts of medicinal plants are used:

Sr. No.	Plants parts	Numbers
1	Leaves	30
2	Stem	05
3	Root	15
4	Stem bark	07
5	Fruit	28
6	Unripe fruit	02
7	Seeds	15
8	Flowers	10
9	Inflorescence	02
10	Whole plant	05
11	Gum	02
12	Rhizome	01
13	Oil	01
14	Tender shoots	02
15	Flowers buds	01
16	Pulp	03
17	Latex	02

Mode of administration:

Paste- 13, Extract- 07, Juice- 19, Decoction-06, Eating vegetables- 32, tea -01, Gargle- 02, Powder -09, Tonic- 01, Pulp- 03, Fumes- 01, Feed to livestocke-01, and Rosted-01.

DISCUSSION AND CONCLUSION

From the result it is concluded that the plant parts of leaves (30) and fruits (28) are mostly used for medicinal purposes and less rhizome (1) and oil (1). Among the plant species used for ethnomedicine. Family Cucurbitaceae is maximum with 04 species and lowest family Oxalidaceae, Portulacaceae, Solanaceae, Asteraceae, Myrtaceae, Mimosaceae, Moringaceae, Capparidaceae, Moraceae and Vitaceae with one family each.

Traditional knowledge is that people know and apply but do not normally convey to other than community/family member. Thus, such knowledge is not taught through conventional education systems. The valuation of wild vegetables cannot be done by as it mostly used by households in remote areas for their livelihoods. The study shows that wide ranges of

uncultivated species are used by the majority of households as fruits 20 species, leaves 18 species, seeds 3 species, flower 2 species, inflorescence 2 species, tender shoots 2 species, and flower bud, petioles and stem with one species each is used as vegetables for dietary purposes.

Out of 28 species studied for their ethnomedicinal and dietary significance, all the species of wild vegetables were already studied for their medicinal properties and use by the country people as well as outside world. These wild vegetables are used for various health ailments such as Urino-genital Disorders: (*Achyranthes aspera* L., *Amaranthus spinosus* L., *Bauhinia purpurea* Willd., *Celosia argentea* L., *Solanum nigrum* L., *Ficus racemosa* L., *Momordica dioca* Roxb. ex Willd., *Oxalis corniculata* L., *Portulaca oleracea* L., *Sesbania grandiflora* (L.) Pers., *Eugenia jambolana* Lam., *Moringa oleifera* Lam., and *Zizyphus oenoplia* (L.) Mill. These observation coinciding with the earlier ethnobotanist Punjani (2010), Kathale and Biradar (2010). Liver and Kidney related diseases: *Achyranthes aspera* L., *Cassia fistula* L., *Cassia tora* L., *Celosia argentea* L., *Oxalis corniculata* L., and *Zizyphus jujube* Mill. These finding were coinciding with the findings of Vijigiri et al., (2013). Piles and Fistula: *Achyranthes aspera* L., *Alocasia indica* (L.) Schott., *Bauhinia purpurea* Willd., *Momordica dioca* Roxb. ex Willd. *Portulaca oleracea* L., *Momordica charantia* L., and *Tamarindus indica* L. This observation coinciding with the earlier ethnobotanist Harish Singh, (1988), M. Parvaiz et al., (2013). Intestinal Ulcers and Stomach disorders, abdominal disorder, intestinal worms: *Achyranthes aspera* L., *Bauhinia purpurea* Willd., *Cassia fistula* L., *Eugenia jambolana* Lam., *Momordica dioca* Roxb. ex Willd., *Oxalis corniculata* L. *Sesbania grandiflora* (L.) Pers., *Solanum nigrum* L., *Cucurbita maxima* Duchesne., *Tamarindus indica* L., *Zizyphus oenoplia* (L.) Mill., *Zizyphus jujuba* Mill., *Punica granatum* L., These observation coinciding with the earlier ethnobotanist Kamble et al., (2008), Biswakarma et al., (2017) and R.S. Prasad. Vomitting, Diarrhea and Dysentery: *Ageratum conyzoides* L., *Amaranthus spinosus* L., *Alocasia indica* (L.) Schott., *Capparis decidua* (Forsk.) Edgew. *Cassia fistula* L., *Celosia argentea* L., *Coccinia indica* Wight. And Arn., *Oxalis corniculata* L., *Ficus racemosa* L., *Portulaca oleracea* L., *Pithecellobium dulce* L., *Sesbania grandiflora* (L.) Pers. *Solanum nigrum* L., *Eugenia jambolana* Lam.,

*Tamarindus indica* L., *Zizyphus oenoplia* (L.) Mill., *Zizyphus jujube* Mill. These observations were coinciding with the enumeration of earlier ethnobotanist. Ghoshal, (2014). Insect bites, Scorpion sting and Snake bites: *Colocasia esculenta* (L.) Schott. *Ficus racemosa* L., *Momordica dioca* Roxb. ex Willd., *Portulaca oleracea* L., *Moringa oleifera* Lam., *Oxalis corniculata* L., These observation coinciding with the earlier ethnobotanist S.D. Jagtap et al., (2012). Abortifacient, Gonnorrhoea, Menstruation, Emmenagogue: *Achyranthes aspera* L., *Ficus racemosa* L., *Pithecellobium dulce* L., *Moringa oleifera* Lam., *Semecarpus anacardium* L.f., *Amaranthus spinosus* L., These observation coinciding with the enumeration of earlier ethnobotanist Dube, (2015). Tonic: *Ageratum conyzoides* L., *Cassia fistula* L., *Cassia tora* L., *Oxalis corniculata* L., Diabetes: *Bauhinia purpurea* Willd., *Cassia fistula* L., *Ficus racemosa* L., *Momordica charantia* L., *Eugenia jambolana* Lam., These observation coinciding with the enumeration of earlier ethnobotanists Chhetri et al., (2005). Constipation: *Bauhinia purpurea* Willd., *Cassia tora* L., *Cucurbita maxima* Duchesne, Headaches: *Ageratum conyzoides* L., *Oxalis corniculata* L., *Sesbania grandiflora* (L.) Pers., *Semecarpus anacardium* L.f., Bloodpurifies and tonics: *Ageratum conyzoides* L., *Bauhinia purpurea* Willd., *Capparis decidua* (Forsk.) Edgew. and *Cassia fistula* L. These observations coinciding with the earlier ethnobotanist Rozina et al., (2017). Cuts and Inflammation, Astringents, Antiseptic, Burns, Wounds: *Achyranthes aspera* L. *Alocasia indica* (L.) Schott., *Ageratum conyzoides* L., *Amaranthus spinosus* L. *Bauhinia purpurea* Willd., *Capparis decidua* (Forsk.) Edgew., *Solanum nigrum* L., *Momordica dioca* Roxb. ex Willd., *Oxalis corniculata* L., *Cucurbita maxima* Duchesne., *Coccinia indica* Wight. And Arn., *Eugenia jambolana* Lam., *Tamarindus indica* L., *Pithecellobium dulce* L., *Mangifera indica* L., *Zizyphus oenoplia* (L.) Mill., *Zizyphus jujuba* Mill., These observation coinciding with the earlier ethnobotanist Kuvar and Bapat (2010), Alam et al., (2011) Wadankar et al., (2011), Sadale and Karadge (2013) Shrirame et al., (2014). Skin related diseases - Psoriasis, Eczema, Leucoderma, Ringworm, Leprosy, pimples, acne, Small pox, Chicken pox, Scabies, cracks of soles or heels, Dandaruff: *Achyranthes aspera* L., *Amaranthus spinosus* L., *Bauhinia purpurea* Willd., *Cassia fistula* L., *Cassia tora* L., *Momordica*



dioca Roxb. ex Willd., *Momordica charantia* L., *Semecarpus anacardium* L. f., *Pithecellobium dulce* L. This observation coinciding with the earlier ethnobotanist Laxaman and Bhaskar, (2011), Korpenwar, (2012). Asthma, Cough, Cold, Fevers, Bronchitis, Pneumonia: *Ageratum conyzoides* L., *Bauhinia purpurea* Willd., *Cassia tora* L., *Momordica dioca* Roxb.ex Willd., *Oxalis corniculata* L., *Cucurbita maxima* Duchesne., *Tamarindus indica* L., *Moringa oleifera* Lam., *Sesbania grandiflora* (L.) Pers., These observation coinciding with the earlier ethnobotanist D. N. Mishra (2009) Shende and Dalal., (2018), Anthelmintic and tapeworms: *Achyranthes aspera* L., *Alocasia indica* (L.)Schott., *Bauhinia purpurea* Willd., *Capparis decidua* (Forsk.)Edgew., *Cassia tora* L., *Momordica dioca* Roxb. ex. Willd., *Cucurbita maxima* Duchesne., *Mangifera indica* L., *Oxalis corniculata* L., *Solanum nigrum* L., *Ziziphus oenoplia* (L.)Mill., These observation coinciding with the earlier ethnobotanist Hazarika and Panday (2010), Manish H. Bchani (2012), Kumari Sunita et al., (2017) Rheumatism: *Ageratum conyzoides* L., *Capparis decidua* (Forsk.), Edgew., *Oxalis corniculata* L., *Solanum nigrum*L., *Sesbania grandiflora* (L.)Pers., *Cucurbita maxima* Duchesne., *Cissus quadrangularis* L., *Galactagogue* and *Lactation*: *Amaranthus spinosus* L., *Cucurbita maxima* Duchesne. These observation coinciding with the enumeration of earlier ethnobotanist Haridutta, Dandotiya et al (2013) Aphrodisiac, Debility in the male, sexual vigour, Ipotency, Syphilis: *Capparis decidua*(Forsk.)Edgew., *Celosia argentea* L., *Momordica dioca* Roxb.ex Willd., *Semecarpus anacardium* L. f., *Cassia fistula* L., *Ficus racemosa* L., *Moringa oleifera* Lam., These observation coinciding with the earlier ethnobotanist Noumi et al., (1998). Night blindness, Eye related diseases, Cataract: *Cassia tora* L., *Celosia argentea* L., *Sesbania grandiflora* (L.)Pers., *Coccinia indica* Wight. And Arn., These observation coinciding with the earlier ethnobotanist Kaynat Jameel and Priyanka Verma (2014). Dyspepsia, indigestion, digestive disorder, gastric problems, digestive system: *Bauhinia purpurea* Willd., *Celosia argentea* L., *Ficus racemosa* L., *Momordica dioca* Roxb., *Cucurbita maxima* Duchesne., *Semecarpus anacardium* L. f., *Cissus quadrngularis* L., *Pithecellobium dulce* L., These observation coinciding with the enumeration of earlier ethnobotanist viz. Sidhalimnga Murty, Vidyasagar G.M.(2013).Flatulence: *Bauhinia purpurea* Willd.,

*Cassia tora* L., *Solanum nigrum* L., Emetic: *Cassia fistula* L., *Sesbania grandiflora* (L.)Pers., Antidote to poison: *Achyranthes aspera* L., *Bauhinia purpurea* Willd., *Momordica dioca* Roxb. ex. Willd., Toothache, Bleeding gums, Strengthening gums, Sore throats, Mouth ulcer: *Portulaca oleracea* L., *Sesbania grandiflora* (L.) Pers., *Eugenia jambolana* Lam., *Tamarindus indica* L., *Ziziphus oenoplia* (L.)Mill., These observation coinciding with the earlier ethnobotanist Badgular et al., (2008). Hypertension, Cardiac debility, Mental disorder, Heat stroke: *Cassia tora* L., *Momordica dioca* Roxb.exWilld., *Mangifera indica* L., These observation coinciding with the earlier ethnobotanist Khaling Mikawlawng et al., (2018). Bone fracture: *Cassia fistula* L.these above observation coinciding with the enumeration of earlier ethnobotanists. Badane et al., (2008).

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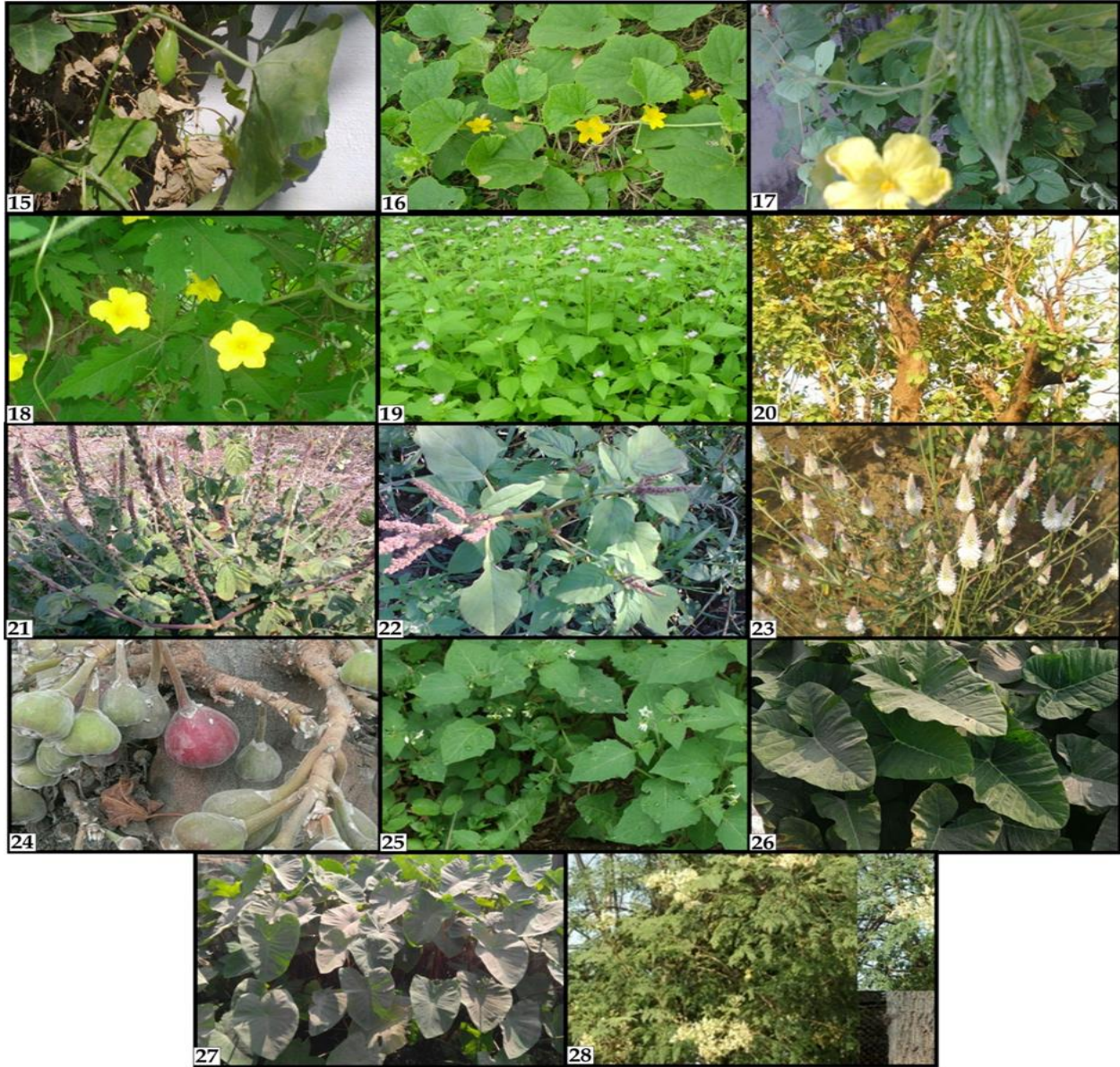
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1. Family: Capparaceae *Capparis decidua* (Forssk.) Edgew., 2. Family: Portulacaceae *Portulaca quadrifida* L., 3. Family: Oxaladaceae *Oxalis corniculata* L., 4. Family: Rhamnaceae *Zizyphus oenoplia* (L.) Mill., 5. Family: Vitaceae *Cissus quadrangularis* L., 6. Family: Rhamnaceae *Zizyphus jujuba* Mill., 7. Family: Caesalpiniaceae *Senna tora* (L.) Roxb., 8. Family: Anacardiaceae *Semecarpus anacardium* Lf., 9. Family: Anacardiaceae *Mangifera indica* L., 10. Family: Mimosaceae *Pithecellobium dulce* (Roxb.), Benth., 11. Family: Fabaceae *Sesbania grandiflora* (L.) Pers., 12. Family: Fabaceae *Tamarindus indica* L., 13. Family: Myrtaceae *Eugenia jambolana* Lam., 14. Family: Caesalpiniaceae *Cassia fistula* L.



15. Family: Cucurbitaceae *Coccinia indica* Wight and Arn. 16. Family: Cucurbitaceae *Cucurbita maxima* Duchesne.,  
17. Family: Cucurbitaceae *Momordica charantia* L., 18. Family: Cucurbitaceae *Momordica dioica* Roxb. ex Willd.,  
19. Family: Asteraceae *Ageratum conyzoides* (L.) L., 20. Family: Sapotaceae *Madhuca longifolia* (J.Koenig ex L.) J.F.Macbr.,  
21. Family: Amaranthaceae *Achyranthus aspera* L., 22. Family: Amaranthaceae *Amaranthus spinosus* L.,  
23. Family: Amaranthaceae *Celosia argentea* L., 24. Family: Moraceae *Ficus carica* L.,  
25. Family: Solanaceae, *Solanum nigrum* L., 26. Family: Araceae *Alocasia indica* (Lour.) Spach,  
27. Family: Araceae *Colocasia esculenta* (L.) Schott, 28. *Moringa oleifera* Lam.