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Monsoon Wild Edible Plants and their Utilization in Traditional Recipes of Dahanu Taluka of Palghar District, Maharashtra State, India

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Abstract

This paper deals with the status of monsoon wild edible plants and their traditional utilization as diet recipes by tribal communities of Dahanu Taluka. Total 46 species belongs 43 genera and 31 families of monsoon wild edible are documented. Out of 46 species 17 were herbaceous, 12 shrubs, 08 climbers/twinners/ creepers and 09 trees. 24 species are consumed as leafy vegetables, 14 species fruit, 4 species flower and 4 species stem, 3 species tubers and rhizome. All plants arranged alphabetically in the tabular form followed by families, local name, habit, and plant parts used.

Keys words: Dahanu Region, Monsoon Wild Edible Plant, Traditional Recipes.

1. Introduction

During Monsoon season various types of wild edible plants are consumed as a source of food. Tribes of Dahanu taluka use wild plants for various purposes. e.g. food, Fodder, medicine, various religious activities making agriculture tool and house making etc. (D. Patil, 2017, Tosh, 1996, 2004 and 2012). Diversity in the wild vegetables not only gives variation in diet but also provides nutritional diversity (Tabassum Khan 2014). Developing countries like India where food insecurity, malnourishment, poverty is more acute, potential of wild vegetables in providing food nutrition, source of income and livehood in rural setting can be acknowledged (Kakade 2014). Some publication only deals with enumeration of wild useful plants and their uses (D. Patil et.al.2017, Dipankar Seb. 2015, Atram S. 2015, Deshmukh et.al. 2011, K.Yesodhran et.al.2007, Chaithanya V. et.al.2015, Kulkarni et.al.2003, Sundriyal & Sundriyal 2004, Wehmeyer & Rose 1983). There were no work that records the diversity and usability of monsoon wild edible plants in Dahanu. Therefore present study was planned to document the diversity in monsoon wild edible plants used by rural as well as urban people of Dahanu.

2. Materials and Method

Dahanu taluka lies between 19°58' N latitude and 72°44'longitudes. During the Manson season climate condition of Dahanu taluka is temperature 26.4° C and average rainfall 756 mm. Main tribal communities present in Dahanu are Adivasis (Warli, Dubla, Dhodi), Bhandari (Agari) Mangela and Bari. Study carried out during the month of June 2018 to Sep 2018. The information related to wild edible plants obtained through household survey, semi-structured interview and informal discussion with experienced and elderly tribal people. Interview were asked to know about the plants vernacular names of plant, part use, kind of traditional recepies preparation filed data has been noted in the field diary. In each and every visit specimen were collected. Species

identification was confirmed by using flora (Cooke T. 1901-1908) and Flora of Maharashtra (1996). And persevered in the form of herbarium and photography.

3. Enumeration of Recipes

- 1. Begonia crenata, Dre, Boerhaavia diffusa, Linn., Cassia tora, Linn., Carissa carandus, Linn., Celosia argentea, Linn., Chlorophytum tuberosum, Bak., Commelina benghalensis, Linn., Cryptocoryne retrospiralis, Kunth., Hydrocotyle asiatica, Linn., Ipomea aquatica, Forsk., Ipomea seperia, ,Koenig., Leea indica, Burm, Leea macrophylla, Roxb., Oxalis corniculata, Linn., Oxystelma esculentum, R. Br., Oroxylum indicum, Vent., Peucedanum grande, Clarke., Portulaca oleracea, Linn. Leaves are cut into small pieces and cooked with salt, chilly, turmic and mustard seed, curry leaves and onion in oil.
- 2. Basella alba, Linn. Leaves cut into small pieces added besan, turmeric, salt and make 'Bhaji'.
- 3. Randia dumetorum, Lamk. Unripe fruit cut into small pieces add turmeric cooked with salt, chilly, turmic and garnished by mustard seed, curry leaves and onion in oil.
- 4. Amorphophallus commutatus, Eng.- Take inflorescence of this plant to frist of all remove the stigma (yellow colour) then cut into small pieces. Add onion, tamind/unripe fruit of Garuga pinnata, Roxb. destroy itching properties, turmeric chili powder. Sometime some people add to dry fishes like dry bombaduct.
- 5. Pickles Unripe fruit of *Garuga pinnata*, Roxb., *Cordia myxa.*. Linn.. and *Spondias mangifera*, Willd. are cut into small pieces put into chili powder, turmeric small quantity of oil and salt.
- 6. Oroxylum indicum, Vent.- Pods are cut into small pieces added into boiling water then put into cold water for 5 hours. After 5 hours make curry with dry fishes.
- 7. Dioscorea bulbifera, Linn. -Tubers are boil in water add turmeric powder to destroy itching properties.

4. Result and Discussion

During the field survey 46 species of wild edible plant were documented that belong to 43 genera 31 families. **Life forms** indicated that herb were dominating (37%) followed by Shrubs (26%), tree (19%) and climbers/twinners/creepers (18%). Fig.1.Plants part-Out of these mansoon wild edible plants 52% species was used as leafy vegetables, 30% species fruit, 8% species flower and stem/shoot and 6% species of tubers (Fig.2). Percentage of protein, mineral content in wild edible and leafy vegetables are equal or even more than the conventional leaf vegetables (J. Tosh 2018). *Hydrocotyle asiatica*, Linn. And *Commelina benghalensis*, Linn. have been found to be very good source of protein (Kulkarni et al.,2003). Tuber of *Dioscorea bulbifera*, Linn., leaves of *Oxalis corniculata*, Linn. And *Cassia tora*, Linn. are good sources carbohydrats, protein and dietary fibres. Species of *Portulaca oleracea*, Linn., *Hydrocotyle asiatica*, Linn. And *Cassia tora*, Linn.are good source of iron (Kanchan Lata Vishwakarma et.al.,2011)

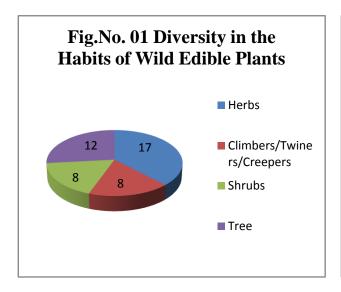
Table No. 01 Manson Wild Edible Plant

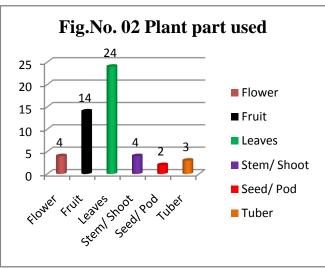
Sr.	Botanical Name	Family	Local Name	Habit	Edible Parts
No					
1	Annona squamosa, Linn.	Annonaceae	Sitaphal	Tree	Fruit
2.	Annona reticulata, Linn.	Annonaceae	Ramphal	Tree	Fruit
3.	Asparagus racemosus, Willd.	Liliaceae	Satavari	Shrub	Tuber
4.	Amorphophallus commutatus, Eng.	Araceae	Shevla	Herb	Inflorescence

5	Antidesma diandrum, Roth.	Funharhiagasa		Tree	Fruit
	·	Euphorbiaceae			
6.	Basella alba, Linn.	Basellaceae	Velbondi	Twinner	Tender Leaves
7	Bauhinia acuminata,Linn.	Leguminisae	Koral	Shrub	Leaves
8	Begonia crenata, Dryand.	Bigoniaceae		Herb	Leaves
9	Boerhaavia diffusa,Linn.	Nyctaginaceae	Khapara	Herb	Leaves
10	Bridelia retusa, Spr.	Euphorbiaceae	Aasan	Tree	Fruit
11	Cassia tora,Linn.	Leguminasae	Takla	Herb	Tender Leaves
12.	Carissa carandus, Linn.	Apocynaceae	Karavanda	Shrub	Young leaves
13.	Celosia argentea, Linn.	Amarantaceae	Kurdu	Herbs	Leaves
14.	Chlorophytum tuberosum, Bak.	Liliaceae	Kuli	Herb	Leaves
15	Commelina benghalensis, Linn.	Commelinacea e	Kena	Herb	Leaves
16	Cordia myxa Linn.	Boraginaceae	Bokar	Tree	Young fruit
17	Costus speciosus, Smith.	Scitamineae	Kosht	Herb	Tubers
18	Cryptocoryne retrospiralis, Kunth.	Convolvulaceae		Herb	Leaves
19	Dendrocalamus strictus, Nees.	Graminae	Bomboo	Tree	Tendor shoot
20	Dioscorea bulbifera, Linn.	Dioscoraceae	Kadu-karanda	Climber	Tuber/bulbil
21	Garuga pinnata, Roxb.	Burseraceae	Kakad	Tree	Unripe fruit
22	Grewia tilifolia, Vahl.	Tiliaceae	Dhaman	Tree	Fruit
23	Holarrhena antidysenterica, Wall.	Apocynaceae	Pandhara-	Tree	Pods
į	•		Kuda		
24	Holostemma rheedianum, Spr.	Asclepidaceae	Shidodi	Twining	Leaves , Flower
į	_	_		shrub	& fruit
25	Hydrocotyle asiatica, Linn.	Apiaceae	Bramhi	Creeper	Leaves & young
į		_			stem
26	Impatiens balsamina, Linn.	Balsaminaceae	Terda	Herb	Stem
27	Ipomea aquatica, Forsk.	Convolvulaceae	Nali	Herb	Leaves & young
00		G 1 1	π .: 1	77 1	stem
28	Ipomea sepiaria, Koenig,	Convolvulaceae	Amti-vel	Herb	Tender leaves
29	Lantana camera, Linn.	Verbenaceae	Ghaneri	Shrub	Fruit
30	Leea indica,Burm.	Vitaceae		Shrub	Leaves
31	Leea macrophylla, Roxb.	Vitaceae	Dinda	Shrub	Leaves
32.	Meyna laxiflora, Robyns.	Rubiaceae	Alu	Shrub	Unripe fruit
33.	Oxalis corniculata, Linn.	Geraniaceae	Ambusi	Herb	Leaves
34	Oxystelma esculentum, R. Br.	Asclepidaceae	Dudhali	Climber	Leaves & flower
35	Oroxylum indicum, Vent.	Bignoniaceae	Tetoo	Tree	Young leaves & flower
36	Passiflora foetida,Linn.	Passifloraceae	Veli-ghani	Climber	Fruit
37	Peucedanum grande, Clarke.	Apiaceae	Bhapali	Herb	Leaves
38	Polygonum glabrum, Willd.	Polygonaceae	Sheral	Herb	Young shoot
39			1		Fruit
	Physalis minima, Linn.	Solanaceae	Ran-popati	Herb	IIuit
40	Physalis minima, Linn. Portulaca oleracea, Linn.	Solanaceae Portulacaeae	Ran-popati Khapra	Herb	Leaves
40 41	-				
	Portulaca oleracea, Linn.	Portulacaeae	Khapra	Herb	Leaves
41	Portulaca oleracea, Linn. Radermachera xylocarpa, K.Schum.	Portulacaeae Bignoniaceae	Khapra Kharsheng	Herb Tree	Leaves Pod
41 42	Portulaca oleracea, Linn. Radermachera xylocarpa, K.Schum. Randia dumetorum, Lamk.	Portulacaeae Bignoniaceae Rubiaceae	Khapra Kharsheng Pendar	Herb Tree Shrub	Leaves Pod Fruit
41 42 43	Portulaca oleracea, Linn. Radermachera xylocarpa, K.Schum. Randia dumetorum, Lamk. Schleichera trijuga, Willd.	Portulacaeae Bignoniaceae Rubiaceae Sapindaceae	Khapra Kharsheng Pendar Kosimb	Herb Tree Shrub Tree	Leaves Pod Fruit Fruit

5. Conclusion

To create community awareness to accept wild food plant and introduced in cultivation. This will improve food scarcity, malnutrition in tribal area and to conserve harvesting of wild edible plants as well as maintain the region's biodiversity.



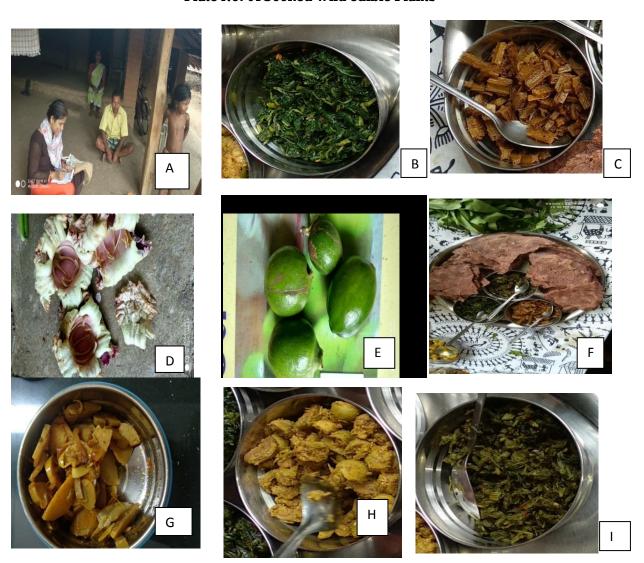


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Plate No. 01Cooked Wild edible Plants



A. Discussion with Tribal People B. Oroxylum indicum, Vent.
 C. Meyna laxiflora, C. Meyna laxiflora, Robyns.
 D. Wild Vegetable Dish E. Dendrocalamus strictus, Nees F. Pickle of Cordia myxa. Linn.
 G. Chlorophytum tuberosum, Bak Tectona grandis
 H. Young leaves of Cassia tora, Linn.
 I. Young Stem of Tectona grandis