
ETHNOBOTANICAL STUDY OF WILD EDIBLE PLANTS OF KHED REGION, PUNE DISTRICT, MAHARASHTRA, INDIA

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Abstract:

An ethno botanical study deals with different wild edible plant use by tribal peoples as a food. The field survey was carried out in Khed region of Pune district. Local people were using plants to use food in terms of the nutritional content of wild edible plants used commonly occurring in this area. Total 73 plant species belonging 45 families were documented uses food in the region.

Key Words: wild edible, fruit, food, consumed.

Introduction:

All of today's common vegetables and fruits were previously wild plants that were cultivated and enhanced for their nutritional value. Wild edible plant species used as a food (Kiran et al., 2019). For vegetarians, eating wild edible plants is a major source of vitamins and micronutrients. The diversity of wild food plants available for usage was noted throughout these studies, which included data on wild uses of the plants consumed by people. Earlier investigations on wild edible plants and their uses were conducted by a variety of researchers. Kar A and Borthakur SK, (2008), Kuvar S D and Shinde R D (2019) , Deshpande, S., Joshi, R., and Kulkarni, D. K. (2015), ,Sinha, R. and Lakra V., (2005), Patil M. V .and Patil D. A. (2000), Mishra A., Swamy S.L., Thakur, T.K.; Bhat R., Bijalwan A., Kumar, A. (2021), Panta S., Parajulee D., Subedi G. Giri B. (2021).

Methodology:**Study Area:**

Khed tehsil is situated in the Pune District and lies between Lat. 18° 37' 1" - 19° 17' 4" N and Long. 73° 30' 51" - 74° 3' 5" E on the north -western part of Deccan plateau and is composed of undulating hilly country. It is bounded on the north by Ambegaon tehsil, on the south by Maval and Haveli tehsils and on the east by Shirur tehsil. The western boundary is formed by the range of Sahyadris. Bhimashankar, Vandra, Tambarvadi etc. are some of the areas covered by Sahyadris in the tehsil. In Khed tehsil total villages are 98. The human population according to the 2001 census approximate 3,43,214, and tribals population 38,272 percentage of total population to the tribal population 11.15 %. Tribals are found in large number in this region.

The present study has been conducted in two steps:

Step I- A survey was conducted among the tribal peoples of Khed region Pune district during 2019- 2021 to gather knowledge on wild plants used for food.

Step II- Plants of flowering and fruit were identified by the help of Cooke, T. (1958), Hooker, J. D. (1872-1897). The tribals of Khed tehsil shared their expertise of plant applications and plant species that they utilized for food.

Results and Discussion:

The present study brought knowledge of tribal for use of wild edible plants. The plant specimens have been identified by the flora and the plants species are alphabetically arranged.

1. *Alternanthera sessilis* (L.) R. Br. ex DC. Family- Amaranthaceae, Local name- Matala, Part used- Leaves, Use- Leaves are used as vegetable.
2. *Amaranthus spinosus* Family- Amaranthaceae, Local name- Katerimath, Part used- Leaves, Use- Leaves are cooked and eaten as vegetable.
3. *Amorphophalus paeonifolius* Dornst Family- Araceae, Local name- Suran, Part used- Corm, Use- The corm is cooked as the vegetable and eaten as food.
4. *Ampelocissus latifolia* (Roxb.) Planch Family- Vitaceae, Local name- Bahinicha vel, Part used- Fruit, Use- Fruits are eaten.

5. *Antidesma acidum* Retz. Family- Euphorbiaceae, Local name- Surpela, Part used- Fruit, Use-Ripened and semi-ripened fruits are eaten.
6. *Bombax ceiba* L. Family-Bombacaceae, Local name- Kate Savar, Part used- Flower, Use- Flower is used as vegetable.
7. *Boerhavia diffusa* (L.) Hook. Family- Nyctaginaceae, Local name- Punarnava, Part used- Leaves, Use-Leaves are cooked as a vegetable.
8. *Bridelia retusa* (L.) Juss. Family-Euphorbiaceae, Local name-Asan, Part used- fruits, Use- Ripe fruits are eaten.
9. *Caesullia axillaris* Roxb. Family-Asteraceae, Local name- Bondala, Part used- Leaves, Use- Leaves are used as vegetable.
10. *Capparis zeyalinica* L. Family- Capparidaceae, Local name- Waghati, Part used- Fruit, Use- Cooked fruits are eaten as vegetable.
11. *Canavalia gladiata* (Jacq.) DC. Family- Fabaceae, Local name - Jungli abhui, parts used- Fruit, Use- Fruits are used as vegetable.
12. *Careya arborea* Roxb. Family-Lecythidaceae, Local name- Kumbhi, parts used- Fruit, Use- Fruits are eaten.
13. *Carissa carandas* L. Family- Apocynaceae, Local name- Karvand, Parts used- Fruit, Use- Fruits are eaten.
14. *Casearia graveolens* Dalzell Family-Flacourtiaceae, Local name-Kirmira, Part used- Fruit, Use: Fruits are eaten.
15. *Cassia tora* L. Family- Caesalpiniaceae, Local name-Tarota, Part used- Leaves, Use-Tender leaves are cooked as a vegetable.
16. *Celastrus paniculatus* Willd. Family- Celastraceae, Local name- Pimpli cha baar, Part used-Flower, Use-Flowers are boiled and water is removed and cooked as a vegetable.
17. *Celosia argentea* L. Family- Amaranthaceae, Local name- Kurdu, Parts used- Leaves, Use- Leaves are used as vegetable.
18. *Centella asiatica* (L.) Urban Family- Apiaceae, Local name- Bramhi, Part used- Leaves, Use-Leaves are crushed to paste and pinch of Pepper and salt is added and mixed to make chutney be eaten.

19. *Cheilocostus speciosus* (J. Konig) C. Specht Family- Costaceae, Local name- Pewda, Parts used- Tuber, Use- Tuber is used as vegetable.
20. *Chenopodium murale* L. family- Chenopodiaceae, Local name- Chilni bhaji, Parts used- Entire plant, Use- Entire plant is used as vegetable.
21. *Colocasia esculenta* L. Family- Araceae, Local name- Tera, Part used- Leaves, Use- Leaves and core of petioles are cooked and eaten a vegetable.
22. *Commelina forkalae* Vahl Family- Commelinaceae, Local name- Kulu, Part used- Leaves, Use- Leaves are cooked and eaten as vegetable
23. *Corchorus capsularis* L. Family- Tiliaceae, Local name- Fotakani, Part used- Leaves, Use- Young and tender leaves are cooked as a vegetable.
24. *Cordia dichotoma* Forst. f. Family- Ehretiaceae, Local name- Bhokar, Parts used- Inflorescence and fruits, Use- The inflorescence is used as vegetable and fruits are eaten.
25. *Cucumis setosus* Cogn. Family- Cucurbitaceae, Local name- Mekkha, Parts used- Fruits, Use- Fruits are used as vegetable.
26. *Curcuma pseudomontana* Graham Family- Zingiberaceae, Local name- Ran Halad, Parts used- Rhizome, Use- Rhizomes are used as vegetable.
27. *Diosporas wallichii* Hook f. Family- Dioscoreaceae, Local name- Chaichamur, Part used- Leaves and inflorescence, Use- Leaves and young inflorescence are used as vegetable.
28. *Digera muricata* (L). Mart. Family- Amaranthaceae, Local name- Tanduli – Matala, Part used- Leaves, Use- Leaves are used as vegetable.
29. *Diospyros melanoxylon* Roxb. Family- Ebenaceae, Local name- Tembhurni, Parts used- Fruit, Use- Fruits are eaten.
30. *Diplocyclos palmatus* (L.) C. Jeffrey Family- Cucurbitaceae, Local name- Mahadevpind, Part used- Leaves, Use- Leaves are used as vegetable.
31. *Dioscorea bulbifera* L. Family- Dioscoreaceae, Local name- Kadukand, Part used- Tuber, bulbils, Use- Boiled tubers and bulbils are eaten.
32. *Dioscorea oppositifolia* L Family- Dioscoreaceae, Local name- Chaiken, Part used- Leaves and inflorescence, Use- Leaves and young inflorescence are used as vegetable.

33. *Embelia basaal* (Roem. & Schult). A. DC. Family-Myrsinaceae, Local name- Ambati, Parts used- Fruit, Use- Fruits are eaten.
34. *Ensete superbum* (Roxb.) Cheesm Family-Musaceae, Local name- Ran-Keli, Part used- Inflorescence, Use- Inflorescence is used as vegetable. Rhizomes are eaten.
35. *Ficus amplissima* Sm. Family-Moraceae, Local name-Payar, Part used-Fruit, 36. Use- Fruits are eaten.
37. *Ficus racemosa* Linn. Family- Moraceae, Local name- UMBER, Part used- Fruit, Use-Ripened fruits are eaten.
38. *Flacourtia indica* (Burm.f.) Merrill Family-Portulacaceae, Local name- Bam, Part used- Whole plant, Use- Whole plant is used as vegetable.
39. *Flueggea leucopyrus* Willd. Family-Euphorbiaceae, Local name- Pichrun, Part used- Leaves and fruits, Uses: Leaves are used as vegetable and fruits are eaten.
40. *Gmelina arborea* Roxb. Family-Verbenaceae, Local name- Shivan, Part used- Fruits, Use- Ripe fruits are eaten.
41. *Grewia hirsuta* Vahl. Family-Tiliaceae, Local name- Kirmid, Part used- Fruits, Use- Ripe fruits are eaten.
42. *Holoptelea integrifolia* (Roxb.) Planch. Family- Ulmaceae, Local name- Papada, Part used- Seeds, Use-Seeds are roasted and eaten as food.
43. *Holostemma ada-kodien* Schult. Family-Asclepiadaceae, Local name- Shiri, Part used- flower, Use- Flowers are eaten.
44. *Indigofera cordifolia* Heyne ex Rot Family- Papilionaceae, Local name- Barbada, Part used- Seeds, Use- Dried seeds are ground, chapattis made form flour are consumed.
45. *Ipomoea aquatica* Forsk. Family-Convolvulaceae, Local name- Nali, Parts used- Leaves, Use- Leaves are used as vegetable.
46. *Ipomoea nil* (L.) Roth. Family-Convolvulaceae, Local name- Nilya, Part used- Leaves, Use- Leaves are used as vegetable.
47. *Ipomoea turbinata* Lag. Family-Convolvulaceae, Local name, Phang, Part used- Leaves, Use- Leaves are used as vegetable.

48. *Jasminum malabaricum* Wight Family- Oleaceae, Local name- Kanser, Part used- Fruit, Use- Fruits are sour in taste, they are boiled and eaten as vegetable.
49. *Lantana camara* L. Family- Verbenaceae, Local name- Kaamoni, Part used- Fruits, Use- Ripened fruits are eaten.
50. *Limonia acidissima* L. Family- Rutaceae, Local name – Kavath, Part used- Fruit, Use- Ripe fruit is eaten.
51. *Madhuca longifolia* (Koen.) Mac Bride, Family- Sapotaceae, Local name- Moha, Part used- Flower, fruit, Use- Fleshy flowers and fruits are eaten.
52. *Manilkara hexandra* (Roxb.) Dub. Family- Sapotaceae, Local name- Khirni, Part used- Fruit, Use- Ripened fruits are eaten.
53. *Merremia hederacea* (Burm. f.) Hall. Family- Convolvulaceae, Local name- Diwati, Parts used- Seeds, Use- Seeds are eaten raw and roasted.
54. *Momordica dioica* Roxb. ex. Willd. Family- Cucurbitaceae, Local name- Kartule, Part used- Fruit, Use- Fruits are used as vegetable.
55. *Moringa concanensis* Nimmo ex Dalz. and Gibs. Family- Moringaceae, Local name- Jungli Shewaga, Part used- Fruit, Use- Fruits are boiled in water and used as vegetable.
56. *Mucuna pruriens* L. Family- Papilionaceae, Local name- Khajol, Part used- Leaves, Use- Leaves are cooked and used as vegetable
57. *Mukia maderaspatana* (L.) Roem. Family- Cucurbitaceae, Local name- Math Ghughri, Part used- Fruit, Use- Ripe fruits are eaten.
58. *Nicandra physalodes* (L.) Gaertn. Family- Solanaceae, Local name- Ran popati, Part used- Fruit, Use- Fruits are eaten.
59. *Oroxylum indicum* (L.) Vent. Family- Bignoniaceae, Local name- Tattu, Part used- flower and fruit, Use- Flowers are boiled and cooked as a vegetable. Fruits are chopped to small pieces and used to make pickle.
60. *Oxalis corniculata* L. Family- Oxalidaceae, Local name- Chihoda Bhaji, Part used- Leaves, Use- Leaves are cooked as a vegetable.
61. *Persicaria glabra* (Willd.) M. Gomez. Family- Polygonaceae, Local name: Mendi, Part used- Leaves, Use- Leaves are used as vegetable.

62. *Phyllanthus reticulatus* Poir. Family-Euphorbiaceae, Local name- Pichrundi, Part used- Fruit, Use- Ripe fruits are eaten.
63. *Physalis minima* L. Family-Solanaceae, Local name- Phuga, Part used- Fruit, Use- Fruits are eaten.
64. *Portulaca oleracea* L. Family-Portulacaceae, Local name-Bam, Part used- Whole plant, Use- Whole plant is used as vegetable.
65. *Pueraria tuberosa* (Willd.) DC. Family-Fabaceae, Local name- Shirvala, Part used- Tubers, Use- Tubers are eaten.
66. *Rivea hypocrateriformis* Choisy Family-Convulvaceae, Local name- Phang, Part used- Leaves. Use-Leaves are used as vegetables.
67. *Schrebera swieteniodes* Roxb. Family-Oleaceae, Local name- Mokha, Part used- Leaves and fruit, Use- Leaves are used as vegetable and fruits are eaten.
68. *Schleichera oleosa* (Lour.) Merr. Family-Sapindaceae, Local name-Koshimb, Part used- Fruit, Use- Fruits are eaten.
69. *Semecarpus anacardium* L. f. Family-Anacardiaceae, Local name- Biba, Parts used- Flower thalamus, Use-Ripened thalamus is eaten.
70. *Senna tora* (L.) Roxb. Family-Caesalpinaceae, Local name- Turtha, Part used- Leaves, Use- Leaves are used as vegetable.
71. *Smilax zeylanica* L. Family- Smilacaceae, Local name- Sherdire, Part used- Shoots, Use-Young tendril and shoots are boiled and cooked as vegetable.
72. *Smithia conferta* J.E. Sm Family- Papilionaceae, Local name- Kawali, Part used- Leaves, Use- Leaves are cooked and used as vegetable.
73. *Sphaeranthus indicus* L. Family-Asteraceae, Local name- Bothada, Part used- Leaves, Use- Young shoots and leaves are used as vegetable.
74. *Terminalia bellirica* (Gaertn.) Roxb. Family- Combretaceae, Local name- Behada, Part used -Seed, Use-Seed testa is removed and cotyledons are eaten as food.

Conclusion:

Ethno-botanical research work is an enlist the wild edible plants for consumption by tribals. In this investigation 73 plants belonging 45 families have been documented. The wild vegetables provide better taste and good health.

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