

# **Documentation of Wild Edible Plants of Melghat Forest, Dist. Amravati, Maharashtra State, India**

**\*Bhogaonkar Prabha Y.<sup>1</sup>, Vishal R. Marathe<sup>2</sup> and Prachi P. Kshirsagar<sup>1</sup>**

Department of Botany, Govt. Vidarbha Institute of Science and Humanitis, Amravati, (M.S.).

\*Email: ybprabha@gmail.com

**Issued: July 01, 2010**

## **Abstract**

An ethnobotanical survey with respect to food plants showed that tribals depend much upon forest products for their various daily needs. Wild edible plants play a significant role in the sustenance of rural life in Melghat. The paper deals with documentation of 42 plant species belonging to 23 families consumed by the tribal and other locals of Melghat area, Dist. Amravati, Maharashtra, India. Plant name, Family, along with their part used, and method of preparation is discussed.

**Keywords:** Wild edibles, Documentation, Melghat, Maharashtra.

## **Introduction**

From ancient time plants have been used as a source of food, shelter, clothing, medicine, fibre, gum, resin, oil, etc. Several wild plants are used as food by tribals and other local people living in and around the forest areas. It has been observed that the traditional knowledge on wild food plants is on sharp decline. Unless efforts are made to educate the younger generations about their importance, this knowledge may be lost in the near future.

Melghat sub-division of Amravati district (Maharashtra, India) comes under tribal sub-plan area. Entire area comes under category – I. i. e. where tribal population is over 50% Tribal sub-plan area extends over an area of 4212 sq.km out of which 77% area is under forest. There are 314 villages having about 80% population of tribals (Indurkar, 1992). Tribal population mainly includes Korkus, Gond and Nihals.

Both floristics and ethnobotany of Melghat area is well studied. The notable published work is by Patel (1968), Dhore & Joshi (1988), Bhoganonkar & Devarkar (1999) and Devarkar (2001). There works make few passing references to mention whether the species is edible or otherwise used. The present survey deals exclusively with first hand information of 42 wild edible species belonging to

23 families. This work is helpful to explore the food habits of tribals of Melghat.

## Methodology

Ethnobotanical survey with respect to ethnic food plants was carried out during July 2004 – July 2009. The region was frequently visited. Locals were interviewed; with the help of employees of Melghat Tiger Project. Some contacts were also established on own. Edible plant species were located with the help of informants. Plant parts used as food and the method of preparation was noted down. Also, the local name was recorded. Plants were brought to laboratory and herbarium specimens were prepared. Specimens are deposited in the herbarium of Department of Botany, Govt. Vidarbha Institute of Science and Humanities, Amravati. Plants were identified using relevant scientific literature (Hooker 1872 – 1877; Cooke 1967 (Rpr.); Sharma *et al.* 1996; Naik 1998; Singh and Karthikeyan 2000, Singh *et al.* 2001).

## Results and Discussion

About 42 plants species were found to be used by Melghat tribals mainly as vegetables, few species for fruits and for grains. Wherever possible, local names were also noted down. Known, commonly used edible species are excluded from the data. Only those species are enumerated which form interesting part of eating habits of tribals of Melghat. It was observed that only old people know about and use the wild vegetables. Young people mainly rely on the vegetables that dominate the market of plain areas. Being mountainous region there is restricted scope for agriculture in Melghat. Survey of weekly markets of the region show that people are trying to cultivate the popular vegetables which actually give the very low yield in Melghat and are available for a short period only. It is necessary to readvocate the use of wild vegetables.

### *Enumeration of species*

**1. *Abelmoschus ficulneus* (L.) Wt. & Arn. ex Wight.** (V. Ran Bhendi). Fam. Malvaceae

Young fruits used for making vegetable. Fruits are covered by tubercle based hairs, which become strigose as fruit matures, making it unfit to eat. However, in a short time capsules become hard and woody; seeds from mature capsules used to make curry.

**2. *Abrus precatorius* L.** (V. Gunj, Gunchi). Fam. Fabaceae.

Flowers sweet; either eaten raw or made into vegetable. Leaves also sweet tasting, chewed as mouth freshner; is used as ingredient of 'Pan'.

**3. *Agave vera-cruz* Mill.** (V. Kekti, Kektad).Fam. Agavaceae

Flower buds and young flowers are eaten raw. They are made into chuttney. (In old days

chuttney was made with red ants. This is not now in practice). Flowers are also made into vegetable.

**4. *Amarantus spinosus* L.** (V. Kanta, Kante-Math). Fam. Amaranthaceae.

Young leaves mixed with chopped onion and made into vegetable,

**5. *Amarantus viridis* L.** (V. Tamba). Fam. Amranthaceae.

Young leaves mixed with onion and made into vegetable. Supposed to be more nutritious and tasty than *A. spinosus*.

**6. *Bauhinia vahlii* Wight & Arn.** (V. Mahulvel, Bhosai, Dhondri). Fam. Caesalpiniaceae.

Young pods are used as vegetable. Mature seeds are eaten after roasting. It is said that handful of roasted seeds are sufficient even for a days hard labour.

**7. *Bauhinia racemosa* Lam.** (V. Bhosa, apta). Fam. Caesalpiniaceae.

Tender shoots and flowers are used as vegetable. Young pods are also said to be edible but not commonly used.

**8. *Bauhinia purpurea* L.** (V. Kachnar, Koilari). Fam. Caesalpiniaceae.

Flower buds large, fusiform; used as vegetable after removing calyx.

**9. *Bauhinia variegata* L.** (V. Kchnar, Champa). Fam. Caesalpiniaceae.

Very tender shoots used as vegetable. Flowers also used as vegetable after removing calyx.

**10. *Begonia crenata* Dryand.** (V. Khatti Bhaji).Fam. Begoniaceae.

Young leaf has pleasant acid taste and is eaten raw like green salad. Because of beautiful pink flowers and single basal leaf, it can be introduced as priced decorative salad in star hotels.

**11. *Boswellia serrata* Roxb. ex Coleber.** (V. Salai, Kadhai). Fam. Burseraceae.

Young drupes are strongly scented. They are pickled; especially by Bari community and given to the patients of arthritis. Wood is regarded as sacred by Korkus. 'Munda' (carved wooden log placed on grave of deceased ones) is prepared from this wood.

**12. *Cassia fistula* L.** (V. Bana, Bhungadu, Banbhungru). Fam. Caesalpiniaceae.

Flowers used as vegetable.

**13. *Cassia tora* L.** (V. Tarota, Torthan). Fam. Caesalpiniaceae.

Vegetable prepared from young leaves is very much popular. It is said that this vegetable if eaten at the beginning of rainy season gives immunity towards seasonal diseases. Young green seeds are used to prepare curry.

**14. *Cassia hirsuta* L.** (V. Deo tarota, Deo Torthan). Fam. Caesalpiniaceae.

Young leaves used as vegetable. Supposed to be more powerful than *C. tora*.

**15. *Celosia argentia* L.** (V. Kurdu, Silgizara). Fam. Amaranthaceae.

Young leaves used as vegetable. Populations growing in marshy places develop red pigment in leaves and stems. Such leaves are preferred over green leaves.

**16. *Ceropegia bulbosa* Roxb.** (V. Dadmudale). Fam. Asclepiadaceae.

Tubers are used after boiling to prepare vegetable. Tubers are also eaten raw. However, tubers should be used immediately after removal from soil, if kept for even few hours, they develop bitter taste.

Leaves are little sour, used to prepare vegetable.

**17. *Chlorophytum tuberosum* (Roxb.) Baker** (V. Safed Musali, Turshi, Pulum Musali). Fam. Liliaceae.

Tubers eaten raw, supposed to be very nutritious. Now a days tribals do not use them personally, but collect to sale to the traders. Young leaves used as vegetable.

**18. *Commelina benghalensis* L.** (V. Kena, Kolar). Fam. Commelinaceae.

Leaves are used to make pakodas. Leaves are used in Pooja on specific occasions like Teej, Haritalika Pooja and Mahalaxmi Pooja.

**19. *Dendrocalamus strictus* (Roxb.) Nees.** (V. Basa, Velu, Keltha). Fam. Poaceae.

Young shoot sprouts produced above ground after first rains are collected and cut into pieces. These are boiled in a pot, without covering the pot, so that steam is released free. Boiled shoots prepared into vegetable, pickled or cooked with rice.

**20. *Digera muricata* (L.) Mart.** (V. Kunzru, Kunzar, Tanduljira). Fam. Amranthaceae.

Young leaves used as vegetable.

**21. *Dioscorea belophylla* (Prain) Haines** (V. Jangli Matol, Nand-Kand, Karu Kand). Fam. Dioscoreaceae.

Tubers are eaten.

**22. *Dioscorea bulbifera* L.** (V. Matalu, Bayal). Fam. Dioscoriaceae

Tubers and bulbils edible.

**23. *Dioscorea oppositifolia* L.** (V. Paspoli, Medwan, Gilandru). Fam. Dioscoreaceae.

Tubers edible.

**24. *Dioscorea pentaphylla* L.** (V. Babra). Fam. Dioscoreaceae.

Tubers edible.

Tubers of all the species of *Dioscorea* are processed in the same way for consumption. Tubers are collected before they sprout i.e. before rainy-season. They are cut into slices, tied in cloth and kept in running water in streams or riverbeds overnight. These are then boiled like potato and eaten. Tubers are sometimes roasted in low fire and eaten.

**25. *Ensete superbum* (Roxb.) Cheesuran** (V. Janglikela, Rankel). Fam. Musaceae.

All plant parts except seeds are useful. Rhizomes are locally known as 'Tora'. Rhizomes are boiled and eaten like potato. Inner fleshy part of axis (leaf bases) also used as vegetable. Flowers are cooked to prepare a delicious curry. Fruits edible. Mature leaves are used as plate.

**26. *Ficus racemosa* L.** (V. Umbar, Alarva). Fam. Moraceae.

Ripe fruits (receptacles) eaten.

**27. *Ficus religiosa* L.** (V. Pimpal, Pipri, Rai, Ali). Fam. Moraceae.

Young leaves used as vegetable.

**28. *Grewia abutilifolia* Vent. ex A. Juss.** (V. Chikna, Sitagathalu). Fam. Tiliaceae.

Fruits edible.

**29. *Grewia sclerophylla* Roxb. ex G. Don.** (V. Dhaman, Sithagathalu, Pandi, Nai-anda). Fam.

Tiliaceae.

Fruits edible.

**30. *Grewia tilifolia* Vahl.** (V. Dhaman, Dhamsi, Khesla). Fam. Tiliaceae.

Fruits eaten.

Fruits of all the above species are edible. However, the fruits are not much fleshy, they are small, but taste is nice. They taste like 'Akhrot' (Wall-nut).

**31. *Ipomoea turbinata* Lag.** (V. Kantel Phool). Fam. Convolvulaceae.

Peduncle and thalamus fleshy. Used as vegetable.

**32. *Lannea coromandelica* (Houtt.) Merr.** (V. Moin, Mangi). Fam. Anacardiaceae.

Fruits edible. Eaten as such and also made into pickles, especially by Bari community. Young leaves used as vegetable. Vegetable is prescribed to treat the kidney stone.

**34. *Mangifera indica* L.** (V. Amba, Aam, Marka). Fam. Anacardiaceae.

Though fruits are well known, tribals, in addition use tender leaves (when still reddish in colour).

Tender leaves are made into chutteny. It tastes like young fruits and has very pleasant aroma.

**35. *Oroxylum indicum* (L.) Vent.** (V. Tetu, Phalga, Tutumba). Fam. Bignoniaceae.

Flowers pungent smelling. They are boiled before use and water discarded. Boiled flowers made into vegetable. Young fruits are cut into pieces mixed with salt and kept over night. Water produced is discarded and fruit pieces shade dried for about 24-48 hrs and then pickled. This pickle is used as best medicine for the patients of arthritis.

**36. *Oxalis corniculata* L.** (V. Khatti Bhaji, Ambushi, Khatta Zara). Fam. Oxalidaceae.

Leaves pleasantly acid in taste and refreshing, eaten raw like salad or made into vegetable as such or with dal.

**37. *Oxalis dehradunensis* Raiz.** (V. Khatti Bhaji, Khatta Zara). Fam. Oxalidaceae.

Leaves sour, eaten raw like salad or made into vegetables as such or with dal. Being some what larger and gregarious than *O. corniculata*; is more sought after for vegetable.

**38. *Plumbago zeylanica* L.** (V. Chitrak, Chitur). Fam. Plumbaginaceae.

Young leaves used as vegetable.

**39. *Rivea hypocrateriformis* Choisy** (V. Fang, Phandi). Fam. Convolvulaceae.

Young leaves are steam cooked and made into vegetable. Better taste is obtained if leaves are steam cooked over a layer of freshly cut stems of wheat or over a layer of leaves of *Cynodon dactylon* (Durva). Cooked leaves mixed with Jawar flour is made into Roti. Flowers are also used as vegetable.

**40. *Schleichera oleosa* (Lour.) Oken.** (V. Kusum, Baro).Fam. Sapindaceae.

Young leaves are beautifully copper coloured. These are made into vegetable. Fruits collected for arilate edible seeds.

**41. *Tacca leontopetaloides* (L.) O. Ktze.** (V. Jatashankar, Dev Kanda). Fam. Taccaceae.

Tubers boiled and eaten.

**42. *Xanthium indicum* L.** (V. Gokharu). Fam. Asteraceae.

Mature fruits are roasted on low fire. Fleshy cotyledons eaten.

### **Acknowledgements**

Authors acknowledge the tribals of Melghat for giving the information willingly. They are also thankful to people of Tiger Project Melghat and Mr. Anil Rhode, Chief Coordinator, Madhughat Prkalpa, Zilha Parishad, Amravati, for their help in establishing the contacts with tribals.

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