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## ETHNOBOTANICAL SURVEY OF WILD EDIBLE FRUITS IN KOLHAPUR DISTRICT

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**ABSRACT:** The present study deals with the identification, documentation and ethno-botanical exploration with respect to food value of wild edible fruits from Kolhapur district. Total 30 wild edible fruits were surveyed. Fruits are the nature's gift to mankind; these are not only delicious and refreshing but also the chief source of vitamin, minerals and protein. The wild edible fruits are the normal food of cattle grazers and the forest tribes. Although the popularity of these wild forms of fruits has declined, it is considered that special attention should be paid to them in order to maintain and improve this important source of food supply.

Key words: Ethnobotany, wild edible fruits, Kolhapur district.

#### INTRODUCTION

A scientific study of wild fruits is important for the potential sources which could be utilized at the time of scarcity or during normal days or cultivated as a source of food material for an ever increasing population (Rashid *et al.*2008). Fruits have satisfactory edible proteins with high quality so that we can use them in food industries and as nutrition. Fruits are generally high in fiber, water, vitamin C and sugars.

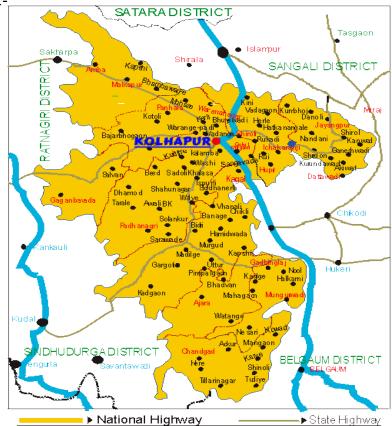
From ancient time edible wild fruits played a very vital part in supplementing the diet of the people. Although the use of wild fruits has recently decreased, many people in rural areas still use them extensively as a supplement to their basic food requirement, some are preserved for use during periods of scarcity, they are some time sold in the urban market and are then in competition with exotic fruits. (Manyafu, J.L. 1971)

There are many workers carried out work on wild edible fruits like Bist and Sharma (2005), Mengistu and Hager(2008), Nitzela,et al.(2007) Rashid et al.(2008), Sankaram, et.al.(2006), Upadhye, et.al (1994), Wehmer(1996). Such kinds of studies have not been attempted by any of the workers in kolhapur district. Therefore, present study has been conducted to document the Ethnobotanical survey of wild edible fruits.

Kolhapur city is located in south-westen Maharashtra 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 founa.

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STUDY AREA:-



Kolhapur is a city situated in the south-west corner of Maharashtra, India.

#### **METHDOLOGY**

Several field trips were undertaken throughout the district at different seasons and collect more information.

To assess the traditional knowledge on wild edible fruits, frequent interactions and discussions were made with the local villagers, which included farmers, herdsmen, shepherds, housewives and children The indigenous knowledge received from them was noted in special field books. Live specimens and available photographs were shown to them for local identification. The fruits were preserved and identified with the help of available literature. (Hooker 1872 – 1877; Cooke 1967 (Rpr.); Singh and Karthikeyan 2000, Singh et al. 2001, Yadav and Sardesai (2002). Further confirmation from department of botany, kolhapur.

The information about the wild edible fruits given by mentioning there botanical name, family, common name, flowering and fruiting, and their uses. The collected fruits are then dried and preserved for further biochemical analysis. Photographs of some important specimens are taken for further details. Plants were identified using relevant scientific literature.

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#### **OBSERVATIONS AND DISCUSSION**

The total 30 wild fruit plants are collected and stored with detailed information regarding scientific name, common name, purpose of uses for future reference and study (Table 1). Out of which 3 species belongs to herbs, 10 species belongs to shrub, 17 belong to trees These are categorized in to ripe edible fruits; unripe fruits used as vegetables; unripe edible fruits. Majority of the fruits are eaten as raw when ripe. It is the sweetish pulp or the fleshy palatable pericarp of the ripe berries or drupes that is generally consumed e.g. *Zyzyphus rugosa* Fruits of *Carrisa carandus*, *Carissa congesta* weight, *carissa inermis* Vahl,Symb.,and *Bridelia scandense* (Roxb.)Willd., *Buchanania cochinchinensis*(Lour), *Eaeagnus conferta*. Roxb. *ziziphus rugosa* Lamk.The unripe fruit used as vegetables and in pickles are *Carissa carandus* L. Mant., *Cordia dichotoma* Linn., *Ficus racemosa* Roxb.

#### **CONCLUSION**

Total 30 plant species are studied during survey. The unripe fruits of Carissa carandus L. Mant., Cordia dichotoma Linn., Ficus racemosa Roxb, Cucumis setosus Cogn. in A.&C.DC., Capparis zeylanica Linn. etc. are used as vegetables or in pickles. Majority of the fruits are eaten raw when ripe. Sweetish pulp of the ripen fruits are generally consumed. The studies contribute the database of traditional knowledge of wild fruits as a food. Further research is carried out for analysis of their nutritional and medicinal values.

#### ACKNOWLEDGEMENT

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### **TABLE 1: List of surveyed wild edible fruits**

		TABLE I; Li			
S.No.	Botanical Name	Family	Common Name	Flowering and Fruiting	Uses
1.	Allophyllus cobbe Linn.	Sapindaceae	Tinpani	May- Nov.	Erect shrub. The fruits are sweet in taste. Ripe and unripe fruits are eaten as raw.
2.	Antidesma ghasembilla Gaertn.	Euphorbiaceae	Ambuti	Mar-July	Small tree. Ripe fruits are eaten as raw.
3.	Bridelia retusa (L.) spreng.	Euphorbiaceae	katak	Aug- Dec	Moderate sized tree.Ripe fruits are eaten as raw
4.	Bridelia scandense (Roxb.)Willd.	Euphorbiaceae	katak	Oct- apr.	Large scandent shrub. Ripe fruits are eaten as raw
5.	Buchanania cochinchinensis(Lour)	Anacardiaceae	charoli	Feb- May	Small tree. Ripe fruits are eaten as raw
6.	Capparis zeylanica Linn.	capparidaceae	waghati	Dec-May	Scandant shrub. Unripe fruits used as a vegetable.
7.	Carissa carandus L. Mant.	Apocynaceae	karavand	Jan-July	An evergreen thorny shrub. Berries are sweet and eaten raw and made in to pickle. A deciduous tree. Unripe fruits are used as vegetable and ripe eaten as
8.	Carissa congesta weight.	Apocynaceae	karavand	Mar-july	such.
9.	carissa inermis Vahl,Symb.	Apocynaceae	Rede karavand	Jan- Aug.	
10.	Cordia dichotoma Linn.	Boraginaceae	bhokar	Mar-Aug.	Small tree. Ripe fruits are eaten as raw.
11.	Cucumis setosus Cogn. in A.&C.DC.	cucurbitaceae	Mehaki	Aug-Oct.	Annual herbs. Ripe fruits eaten as raw and also as vegetables
12.	Cucumella ritchi(chakr.)	cucurbitaceae		June- aug	Annual climbing herb, fruits are edible.
13.	Dillenia pentagyna Roxb.	Dilleniaceae	Karmal	Sept –Feb.	An evergreen tree. A fleshy pulp of ripe yellowish fruit is consumed.
14.	Diospyros melanoxylon Roxb.	Ebenaceae	Temburn i	Feb-July	Small dacideous tree. Ripe fruits are eaten as raw
15.	Eaeagnus conferta. Roxb.	Elaeagnaceae	Nerli	Nov-May	Scandent shrub, Ripe fruits are eaten as raw
16.	Ficus racemosa Roxb.	Urticaceae	Umbar	Feb-June	Large evergreen tree Unripe fruits are used as vegetable Ripe fruits are eaten as raw
17.	Flacourtia indica Roxb.	Flacourtiaceae.	Tambat	Dec-July.	A deciduous shrub. Fruits acidic and edible, also used in sarbat.
18.	Garcinia indica chois.	Clusiaceae	Ratamba	Nov-Aug.	Tree. Fruits acidic and edible, also used in sarbat.
19.	Garcinia talbotii Raiz.	Clusiaceae	Limboti	Mar-Aug	]
20.	Glycosmis pentaphylla Corr.	Rutaceae	Kirmira.	Oct-May	Shrub. Fruits acidic Ripe fruits are eaten as raw
21.	Grewia tillifolia Vahl.	Tiliaceae	Dhaman	May-Aug	Tree. Fruits acidic Ripe fruits are eaten as raw
22.	Manilkara hexandra(Roxb.)Dub.	Sapotaceae	khirani	Dec-Apr.	Evergreen tree. The ripe fruit are fleshy and sweet.
23.	Meyna laxiflora Robyns.	Rubiaceae	Alu	Jan-July	Small tree The ripe fruit are fleshy and sweet. Ripe fruits are eaten as raw
24.	Nothopegia castaneifolia(Roth)	Anacardiaceae	Amberi	Dec-June.	Small tree. Ripe fruits are eaten as raw
25.	Solanum americanum Mill (S. nigrum L.)	Solanaceae	Kanguni	Aug-jan	A scandent shrub. The small reddish brown fruits are sweet.
26.	Scleichera oleosa merr.	Sapindaceae	Kusum	Mar-July	Tree. Ripe fruits are eaten as raw
27.	Syzizium caryophyllatum(L)	Myrtaceae	Nimbuli	Mar-May	Small tree, ripen fruits eaten as a raw.
28.	Syzizium cumini(L)	Myrtaceae	Jambhul	Mar-July	Large tree, ripen fruits eaten as a raw.
29.	Syzizium laetum(L)	Myrtaceae	Jambhul	Feb-May	Small tree, ripen fruits eaten as a raw.
30.	ziziphus rugosa Lamk.	Rhamnaceae	Toran	Dec-Apr.	Large straglling shrub. Ripe fruits are eaten as raw
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