

Wild edible fruits of Sithimani hill, Bagalkot dist of Karnataka, India

Arati Laddimath¹, Prashanth PKM IFS², Ashwini Budihal³

¹ Department of Botany, Karnataka State Akkamahadevi Women's University, Vijayapur, Karnataka, India

Correspondence Author: Arati Laddimath

Received 18 May 2022; Accepted 29 Jun 2022; Published 26 Jul 2022

Abstract

An ethnobotanical study of wild edible fruit species survey of Sithimani hill near Bagalkot district of Karnataka conducted during March 2018 to June 2022. The purpose of this survey was to document the wild edible fruit species. There are about 40 species of angiosperms belonging to 33 genera and 21 families of wild edible fruit plant species were documented.

Keywords: wild edible fruits, sithimani hill, bagalkot, karnataka

Introduction

Information of wild edible fruit plant species is declining drastically day by day. The wild edible fruit play an important role in traditional lifestyles, nutrition and medicine to local people. The main aim of this study is to find out the wild edible fruits of Sithimani hill as it is rich in forest wealth and also no studies on this aspect have been recorded. If information is not collected it may be lost in near future. In Ramayana Seeta matha spent time in this hill i.e. Seethimani hill, Lava and Kusha ponds which are believed to never dry up and always have water in them. Old lady Shabari fed wild edible sweet Zizyphus fruit to Rama near to this hill. Zizyphus is xerophytic and most dominant plant in this region. The present study was initiated with an aim to identify wild fruit species in Sithimani hill near Alamatti, Bagalkote district of Karnataka.

Material and Methods

Ethnobotanical Data collection

Ethno wild fruits plant species survey conducted on March 2018 to June 2022. For this, frequent field trips were conducted. Data and information recorded in the standard questionnaire. Prior Informed Consent (PIC).

Voucher specimen collection and identification

Collected data and information include, scientific name, family, vernacular name, time of availability, edible part, habit and mode of consumption. Ethno wild edible plant species were photographed in the field. Plant specimens were identified consulting with experts, by referring Flora of Gulbarga District^[11], three volumes of the Flora of Presidency of Madras^[5]. The voucher specimens were stored at the herbarium centre, Department of post graduate studies and Research in Botany, Karnataka State Akkamahadevi Women's university, Vijayapur.

Study Area

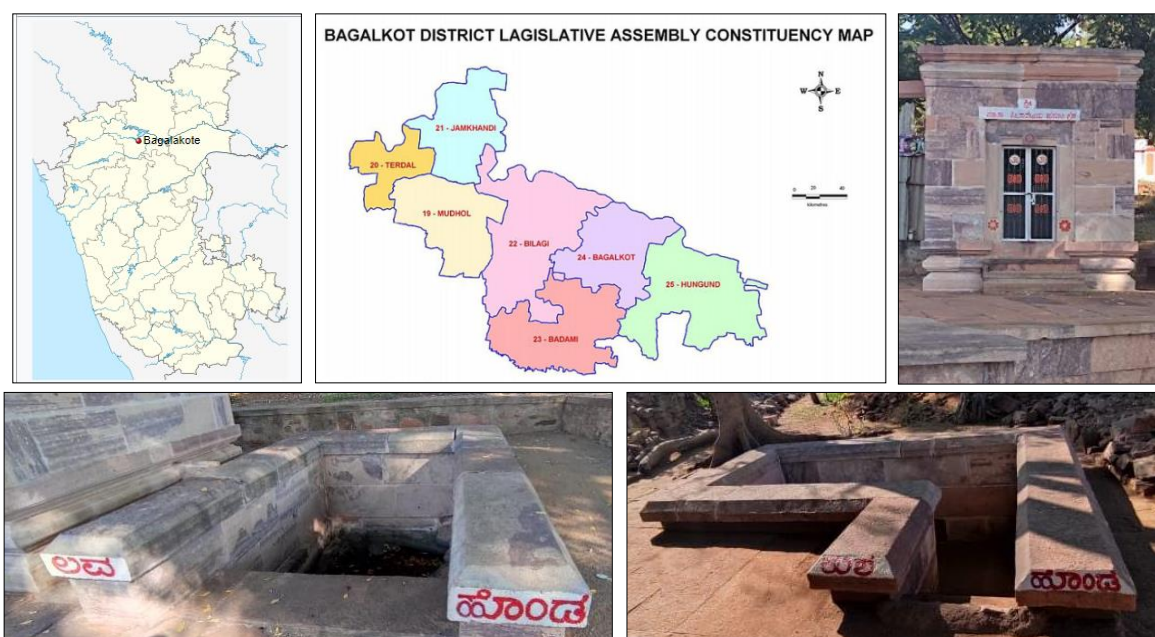


Fig 1: Map and temple of the Sithimani hill

Result and Discussion

In the present account, there are about 40 species of angiosperms belonging to 33 genera and 21 families of wild edible fruit species were reported. Among the wild edible fruit species habit wise the herbs are (27.3%), climbers are (20%), shrubs are (17.5%) and trees are (35%). The predominant family Fabaceae with 6 species, Cucurbitaceae and Ramnaceae with 5 species, Solanaceae with 3 species, Malvaceae, Chenopodiaceae and Rutaceae with 2 species and remaining have the one species. Data obtained from the survey is compiled in Table 1. All plant species scientific name, family, vernacular name, time of availability, habit and mode of consumption are provided. Most dominant wild fruit of this

area is Zizyphus, 26 wild edible plants documented by Hakki Pikki Tribes of Angadihalli, Hassan District ^[3], 66 Wild edible plants and ayurvedic formulation documented in Hassan District, Karnataka ^[4], 7 wild edible plants nutritional analysis has done ^[5]. Selected 24 wild edible vegetables documented by Hyderabad-Karnataka region of Karnataka ^[8], 105 Wild edible plants documented in old Mysore district ^[8]. 93 wild edible plants documented among two communities in Malia Madashwar ^[9]. 64 Wild edible plants documented by kokni tribe of nasik district. 24 Ethno botanical survey of commercial wild edible plants survey has done in Bidar ^[12]. 70 Wild edible plant species in Alamatti Hill range area has studied ^[1] but still no research has reported in Sithimani hill.

Table 1: Wild edible fruit plant species of Seethimani hill, Bagalkot dist. Karnataka

S.No	Scientific name	Family	Local/ Vern name	Time of availability	Habit	Mode of consumption
	<i>Abelmoschus ficulneus (L.)</i> Wt.	Malvaceae	Kadu bende	September to December	Herb	Fruit eaten as raw or used as curry
	<i>Atylosia scarabaeoides (L)</i>	Fabaceae	Kaadu thogari	September to January	Herb	Seeds eaten raw
	<i>Basella alba L.</i>	Chenopodiaceae	Bili Basale	Throughout the year	Climber	Ripened fruits are eaten
	<i>Basella rubra</i>	Chenopodiaceae	Kari basale	Throughout the year	Climber	Ripened fruits are eaten
	<i>Capparis decidua (Forsk.)</i> Edgew	Capparadaceae	Nematyan kanthi	October to January	Shrub	Fruits used in preparation of pickles
	<i>Capsicum annum L</i>	Solanaceae	Lavanga menasinaakaayi	August to September	Herb	Fruits used to prepare chilli powder
	<i>Carissa carandas</i>	Apocynaceae	Kavali kaayi	August to September	Shrub	Raw fruits are eaten with salt. Ripen fruits also eaten
	<i>Coccinia grandis (Rottler)</i>	Cucurbitaceae	Thondekaayi	September to December	Climber	Fruit used to prepare curry
	<i>Cucumis callosus. Rottler</i>	Cucurbitaceae	Udda Mekkekaayi	September to December	Climber	Fruit used to prepare curry and pickle
	<i>Cucumis melo</i>	Cucurbitaceae	Gunda Mekkekaayi	September to December	Climber	Fruit used to prepare curry and pickled
	<i>Feronia elephantum Lam.</i>	Rutaceae	Ballookaayi	November to March	Tree	Fruit pulp mixed with Jaggary and eaten
	<i>Ficus glomerota Roxb</i>	Moraceae	athhikaayi	January	Tree	Fruit is edible
	<i>Grewia tenax</i>	Malvaceae	Kavali kaayi	May to September	Shrub	Unripe fruit is sour in taste, ripe fruit is sweet delicious. Fruit contains alkaloid
	<i>Lantana camera</i>	Verbenaceae	Chaduranga	Throughout the year	Shrub	Fruits are edible
	<i>Mimosops elangi</i>	Sapotaceae	Bakula	May to August	Shrub	Fruits are edible
	<i>Momordica cymbalaria</i> Fenzl.ex	Cucurbitaceae	Karchikaayi	October to January	Climber	Fruit fried and used as curry
	<i>Moringa oleifera</i>	Moringaceae	Nugge kaayi	January to April	Tree	Fruit used to prepare curry
	<i>Mukia maderaspatana(L.)</i>	Cucurbitaceae	Gubbe savathe	June to September	Climber	Raw fruits are edible
	<i>Opuntia dillenii(Ker-Gawler)Haw</i>	Cactaceae	Rotagalli	February to April	Shrub	Fruits are edible
	<i>Passiflora edulis</i>	Passifloraceae	Rasna fruit	February to April	Climber	Passion fruit is used to make fruit juice and is commonly eaten as a whole fruit.
	<i>Phoenix sylvestris(L.)Roxb</i>	Araceae	Ichchal gida	Throughout the year	Tree	Fruits are edible and stem latex is used to drink
	<i>Pedaliium murex</i>	Pedaliaceae	Kaadu ellu	June to October	Herb	Seeds are edible
	<i>Pithaclobium delces</i>	Mimosaceae	Ilachi kaayi	November to January	Tree	Fruits are edible
	<i>Phaseolus trilobus auct</i>	Fabaceae	Kadu hesaru	June to November	Herb	Raw seeds are edible
	<i>Phyllanthus acidus (L.)</i> Skeels	Euphorbiaceae	Nelli kaayi	June to November	Herb	Fruits are edible
	<i>Rhynchosia minima(L.)Dt</i>	Fabaceae	Kadu huruli	September to December	Herb	Seeds are eaten raw or cooked used like curry
	<i>Salvadora persica L.,Sp</i>	Salvadoraceae	Devvinagida/ Miswak	June to October	Tree	Fruits are edible
	<i>Sesamum prostratum Retz</i>	Pedallaceae	Kadu ellu	September December	Shrub	Seeds are edible
	<i>Solanum nigrum L.</i>	Solanaceae	Kachi kaayi	September January	Herb	Fruit cooked and used as a curry
	<i>Solanum torvum Burm</i>	Solanaceae	Kaadu Badane	September to December	Herb	Fruit used to prepare as a curry
	<i>Syzygium cumini</i>	Myrtaceae	Nerale hannu	June to September	Tree	Fruit is edible
	<i>Tamarindus indica</i>	Fabaceae	Hunase gida	December to March	Tree	1. Younger leaves and flowers used as raw 2. Seeds are fried and eaten 3. Pulp eaten raw or used in curry
	<i>Teramnus labialis</i>	Fabaceae	Kaadu uddu	August to November	Herb	Seeds eaten raw
	<i>Terminalia catapa</i>	Combretaceae	Kadu Badami	May to September	Tree	Fruit are edible
	<i>Vinga frutescens</i>	Fabaceae	Kadu hesaru	September to December	Herb	Seeds used as raw
	<i>Zizyphus rugosa Lam</i>	Ramnaceae	Barekaayi	November to January	Tree	Fruits are edible
	<i>Zizyphus. xylopyrus Will</i>	Ramnaceae	Barekaayi	November to January	Tree	Fruits are edible

<i>Zizyphus jujuba</i>	Ramnaceae	Barekaayi	November to January	Tree	Fruits are edible
<i>Zizyphus nummularia W&A</i>	Ramnaceae	Barekaayi	November to January	Tree	Fruits are edible
<i>Zizyphus oenoplia Mill</i>	Ramnaceae	Barekaayi	November to January	Tree	Fruits are edible

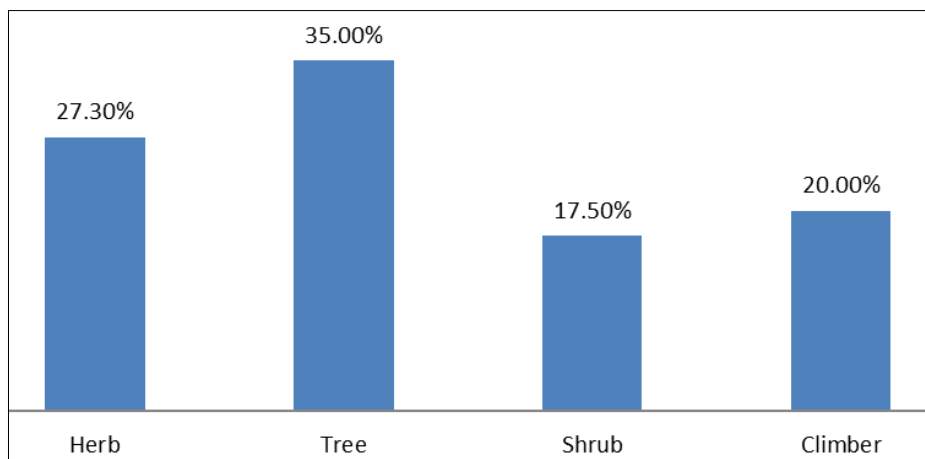


Fig 2: Wild edible fruit species Habitwise

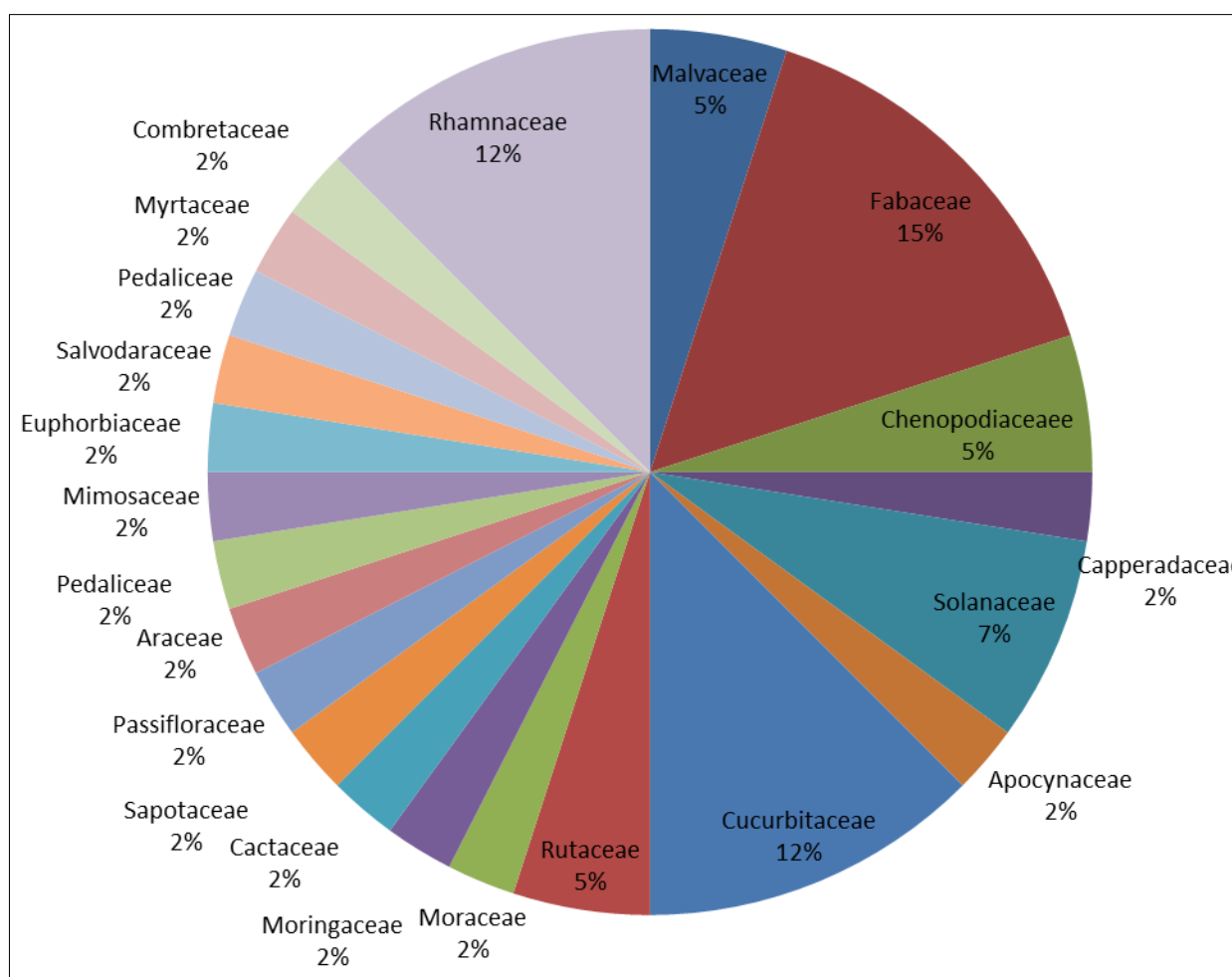


Fig 3: Major families of wild edible fruit species



Fig 4: Wild Edible Fruit species of Seethimani Hill, Alamatti, Bagalkote, Karnataka, India

Conclusions

Ethno wild edible fruit plants species survey conducted on March 2018 to November 2020 in Alamatti hill range area, Vijayapur district. The main purpose of this survey was to document the wild edible plant species. There are about 40 species of angiosperms belonging to 33 genera and 21 families were reported found to be used. Scientific name, family, vernacular name, time of availability, habit and mode of consumption are provided. The study suggests that the present information on wild edible fruit species of Seethimani, near Alamatti hill range area of Bagalkote district may be used for phytochemical and pharmacological research in future for the development of new sources.

Acknowledgements

Authors are thankful to the people of Seethimani, Bagalkote

district, who cordially co-operated in sharing their knowledge and in helping collection of plant material pertaining to the research.

References

1. Arati Laddimath. Wild edible plant species of Alamatti hill range and sub regions, Vijayapur dist of karnataka, India. Lambert Academic Publishing, 2021, ISBN-978-620-4-72838-4.
2. Besnik Rexhepi, Ani Bajrami, Behxhet Mustafa. Ethnobotanical study of wild edible plants in pelagonia region (southwestern macedonia). International Journal of Advances in Science Engineering and Technology, 2018; 6(1):57-61.
3. Prashanth Kumar GM, Shiddamallayya N. Ethanobotanical Study of Less Known Wild Edible Plants

- of Hakki Pikki Tribes of Angadihalli, Hassan District, Karnataka. *Journal of Medicinal Plants Studies*, 2015; 3(5):80-85.
4. Prashanth Kumar GM, Shiddamallayya N. Wild edible plants of Hassan District, Karnataka: A role in ayurvedic formulation. *International Journal of Herbal Medicine*, 2016; 4(1):16-24.
 5. Gamble JS, Fischer CEC. *Flora of the Presidency of Madras*, 1984, 1-3.
 6. Gotruvalli Manjunatha Prashanth Kumar, Lava Chikkappaiah, Shiddamallayya Nagayya. Nutritional analysis of edible wild plants used by hakki pikki tribes of hassan district, karnataka, india. *Int J Pharm Pharm Sci*, 8(8), 390-393.
 7. Hanumantappa Bherigi Nayaka. Medicinal uses of selected wild edible vegetables consumed by Hyderabad-Karnataka region of Karnataka State in India. *Asian Journal of Pharmacy and Pharmacology*, 2020; 6(1):70-75.
 8. Nandini N, Shiddamallayya N. Wild edible plants of old Mysore district, Karnataka, *India*. *Plant Sciences Feed*, 2014; 4(4):28-32.
 9. Harisha RP, Padmavathy S. Knowledge and use of wild edible plants in two communities in Malia Madashwar. *International Journal of Botany*, 2013; 6(2):64-72.
 10. Sachin D Kuvar, Shinde RD. Wild edible plants used by kokni tribe of nasik district, Maharashtra. *Journal of Global Biosciences*, 2019; 8(2);5936-5945.
 11. Seetharam YN, Kotresha K, Uplaonkar SB. *Flora of Gulbarga district, Gulbarga University, Gulbarga*, 2000.
 12. Sujata MP, Rajasab AH. Ethno botanical survey of commercial wild edible plants of bidar district, Karnataka, India. *Indian Journal of Plant Sciences*, 2016; 5(2):74-84.