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Research Article

NUTRITIOUS WILD FOOD RESOURCES OF RAJGOND TRIBE, VIDARBHA, MAHARASHTRA STATE, INDIA

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ABSTRACT
Wild edible plants play a significant role in the sustenance of tribal people residing in forested areas. Survey of wild edible plants has been carried out in ten villages of Deolapar region, Ramtek Taluka, District- Nagpur, Maharashtra, India. The present study deals with the documentation of 73 wild food resources belonging to 42 families which are consumed by Rajgond tribes. Documentation part includes Local name, Botanical name, Family, parts used as food.

Keywords: *Wild Food, Maharashtra*

INTRODUCTION
Traditional knowledge exists worldwide in all communities covering varied areas including health, agriculture and natural resource management. In case of the developing world Africa and Latin America are also rich in traditional knowledge but they are to be found by and large only as oral traditions. Asia in general and India in particular have a distinction that traditional knowledge is found not just as oral tradition but also as classical literature that is written down with its own theoretical framework and with a clear exposition of the basic principles of world views (Nene, 2012).
Aborigines consume a main staple diet and it is supported with supplementary wild foods. These species are consumed by various communities depending on the local availability. The pattern of the tribal livelihood has not changed since time immemorial .In the dense forest area, nature is so kind that for thousands of years it has been possible for these tribals to live in comparative ease by simply hunting and food gathering (Kosambi 1962). A variety of natural products provide them a balanced diet. They include fruits, nuts, berries, leafy vegetables, tubers, yams, mushrooms and honey. Over 200 such natural plant products can be gathered in a season. Besides these, materials for shelter, fabrics, medicine and other necessities for survival are found in surrounding nature (Vartak and Gadgil, 1980; Kulkarniand, 2002a, b). Various preparations of plant species are prepared and sold in tribal markets. Tribals and local communities have accurate knowledge of wild food resources due to their long association with nature (Jain and Sinha, 1988). Survey of wild food plants from Orissa state is made by Sinha and Lakra (2005) and they reported 30 fruits, 30 leaves, 12 flowers, 14 tubers, seeds-11 and 3 gums from five tribal groups.
Gondia tribe in Deolapar region is settled in remote hilly areas. This region is known as Vidarbha and it is 65 km away from Nagpur. Deolaparregion belongs to Ramtek. The area under study has always been known for its food scarcity. There are reports on wild food plants used during famine in Indian conditions (Nene, 2004; Balkundi, 1998). In some areas local food produce is hardly sufficient to meet about two thirds of local requirements. Thus for about four months in each year some of it's unfortunate inhabitants have to migrate to the neighbouring cities and remaining people are obliged to subsist on a starvation diet. These people use many plants, occurring naturally in neighbouring forests, as supplementary food which alone enable them to carry on with their half starved existence. Earlier work on wild edible plants from Maharashtra like Nasik, Amravari, Buldhana, Kolhapur, Jawhar were carried out by Vartak (1959); Vartak and Kulkarni (1987); Kulkarni and Kumbhoikar (1992), Patil and Patil (2000), Bhogaonkar *et al.*, (2010), Kshirsagar *et al.,* (2012), Mahadkar and Jadhav (2013), Joshi *et al.,* 2013).
Tribal people through their ancestral knowledge infer what to eat and what not to eat. They are not aware about rare plants belonging to family Araceae available in the region such as *Theriophonumindicum* (Dalz.) Engler. *Amarphophallu spaeonifollius* (Densst) Nicols., *Amorphophallus konkanensis* Hett. These toxic plants are consumed with traditional method of cooking. Deshpande and Kulkarni (2014) reported

wild leafy vegetable preparation from Undirkani plant from Rajgond tribe. This tribe has traditional method of tuber cultivation and preservation techniques of Flowers, roots, fruits, leaves and mushrooms (Deshpande and Kulkarni, 2013).

They are thoroughly acquainted with the methods of excluding harmful substances from these wild plants and preparing acceptable recipes for their meagre meals. These tribal people prepare some products from unconventional fruits and preserve them (Chothe *et al.,* 2014). The present work has been carried out on documentation of wild edible plants consumed by Gondia tribe from Deolapar region.

Topography

Gondia tribe in Deolapar region is settled in remote hilly area of Ramtek. It is located inaltitude: 1331 feet. N=21°37'21'.948". E=79° 20'39'.944". This region is known as Vidarbhaand it is 80km away from Nagpur. Mahabale (1987) published Gazetteer of India- Maharashtra state, which include Botany and floristic account of Vidarbha region.

This area has thick forest and 1/4th part is occupied by Pench National Park. Gondia communities are dependent on forest areas for their day to day needs like food, fodder, medicines, etc. Most of the tribes are concentrated in heavily forested areas that combine inaccessibility with limited political or economic significance. The economy of most tribes is based on agriculture produce, collection of minor forest produce from forest and hunting of birds/ wild animals.

MATERIALS AND METHODS

The study was conducted in Deolapar block of Nagpur district. 10 villages in Deolapar block were selected for this study. The area lies between 21°26'17'.300" to 21°37' 44'.124 N lat. And 79°17'31'.392" to 79° 20'39'.944"E long.

These 10 villages are forest notified named: Usaripar, Tuiyapar, Sitapar, Murda, Akola, Dhanora, Sawangi, Hivara, Ghoti, Chorbahuli. Mostly the Rajgond community resides here. Selected community depends upon forest for livelihood.

In order to understand the current status about the utility of wild vegetables, various issues were discussed with villagers to understand their perspectives for documentation and conservation of wild vegetables. The success of project was dependent on their attitude, knowledge and their social and cultural values. The information was collected through discussion with various groups like Vaidu, Elder people, SHG groups and Youngsters.

Methodology Used for Documentation of Wild Vegetables

1. Rapport building and community mobilization.
2. Door to door interview using structured and semi structured questionnaire as well as focal group discussion.
3. Interview and focal group discussions (FGD) were made involving Traditional medicine practitioner vaidus, forest guards, old knowledgeable persons, hunter of the forest village and youngsters.
4. Special efforts were made to involve women in the exercise, SHG group of women help a lot to prepare recipe.
5. Identification of wild vegetables by their local name. A total of 50 households were surveyed during 2012-2013.
6. Kitchen garden is the main source of tuber and vegetable cultivation.

Geography

Vidarbha comprises nine districts Buldhana, Yeotmal, Akola, Amravati, Wardha, Washim, Chandrapur, Bhandara and Nagpur. Of these the climate of seven districts except Chandrapur is somewhat similar. The northen and western parts of Vidarbha are climatically similar, but the eastern and southern parts of Bhandara and Chandrapur are rather different. The climate is hot and dry in the seven districts mentioned above, as they are a continuation of Marathwada and Khandesh part of Eastern Maharashtra.

Soils of Vidarbha

The soils in the hilly areas are quite shallow, but fertile. Underground water table is deep. In Nagpur, Wardha and beyond Wardha, the soils are derived from Deccan traps and are rich black cotton soils. But

in Nagpur region towards Amravati, Bhandara and Chandrapur they are sandy loam derived from sand-stones of the Vindhyan origin.

Climatic Condition

Summer is very hot and weather is dry. The annual rainfall is 1161.7 mm. It is well distributed increasing from west to east. Highest rainfall is observed in July. December is coldest. Daily maximum temperature is 28.7°C. May is the hottest month. When the min –max temperature goes to42.7°C.-47 °C. Nights are relatively cool. The thunder storms begin to down. The minimum temperature in winter can be as low as 4°C. Winds are moderate.

Flora of Vidarbha

Works on the flora of Vidarbha as a whole, are practically nill and there is no authoritative text on the flora. So far, Only some lists of plants in different parts of Vidarbha are available and stray references to them are seen in literature. Balapure (1971) reported Nagpur-Vidarbha, Ramtek flora. He estimated about 2000 plants in old Central Province. It is obvious that the flora here is very rich containing dry deciduous, semi- evergreen and some moist evergreen species. The teak (*Tectonagrandis* L) and other timber species grow here very luxuriantly. Earlier documentation on flora of Nagrpur district was made by Ugemuge (1986). Further work carried out on floristic diversity of Nagpur region was by Bhuskute (1989), Thakre and Srinivasu (2012) and Kamble *et al.*, (2013).

In the drier parts *Anogeissus latifolia* Wall, *Dalbergia paniculata* Roxb. *Butea monosperma* (Lamk) Taub. *Hardwicki abinata* Roxb. *Tectona grandis* Linn., *Sterculia urens* Roxb. And *Acacia species* occur. Undergrowth of grasses like *Schimasulcatus* (Hack). A. Kamas., *Apluda mutica* L. and *Cymbopogon martinii* (Roxb) Wats. Bamboos cover large tracks of slopes in drier areas. They are *Dendrocalamus strictus* (Roxb) Neesand in valleys *Bambusa glaucescem* (wild) Sieb.ex Munn. *Lantana camara* L. occupies large tracks of forest lands and forms dense thickets. The other associates are: *Helicterus isora*(Vaghl.)R.,*Nyctanthes arbortristis* Linn, *Pogostemon pletranthoides* (Vahl.) R.Br. and *Vitex negundo* L. During the field work it was observed that local tribes consume 73 wild vegetables which includes whole plant, tubers, stem, leaves, flowers, fruits, young pods, seeds etc.

List of Wild Edible Plants Consumed by Rajgond Tribe

1. *Abrus precatorius* L. (Fabaceae)
Local name: Gunj.
Habitat: It is mostly found in rainy season at dense forest area.
Edible Part: Leaves
2. *Aegle marmelos* L.Corr (Rutaceae)
Local name: Bel
Habitat: It is found at dense forest area.
Edible part: Fruit pulp. .
3. *Alangium salvifolium* L.F. Wang (Alanginaceae)
Local name: Ankol
Habitat: It's availability in March to June found at forest border.
Edible part: Fruits and seeds.
4. *Alocasia macrorhiza* L.G.Don. (Araceae)
Local name: Brahmarakshas
Habitat: It grows near village at road sidein August-November.
Edible part: Leaves.
5. *Amaranthus tricolour* L. (Amaranthaceae)
Local name: Lal mat
Habitat: It grows in Rainy and Winter season. It is also cultivated plant.
Edible part: Leaves.
6 *Amaranthus cruentus* L.(Amaranthaceae)
Local Name: Rajgira/Tandulga
Habitat: Asmall herbaceous plant, .common in Rainy season. Largely cultivated in kitchen garden.

Edible part: Whole plant.
7. *Amarphophallus paeonifollius* (Densst)Nicols. (Araceae).
Local name: Gavathisuran
Habitat: It grows in rainy season in forest and cultivated in Kitchen Garden.
Edible part: Tuber is cooked as a vegetable.
8. *Andrographis paniculata* (Burm. f.) Wall.Ex.Nees. (Acanthaceae).
Local name: Kalmegh
Habitat: Densely forest area and abundant in August to November..
Edible part: Whole plant.
9 *Annonasquamosa* Linn (Annonaceae).
Local name: Sitafal
Habitat: A tree found in forest, observed at roadsides in villages.
Edible part: Fruits are edible obtained in the winter season.
10. *Aristolochia indica*L. (Aristolocaceae).
Local name: Ishwari
Habitat: A climber found in forest areas in the month of August-November.
Edible part: Flowers are edible. Juice is prepared from flowers..
11. *Asparagus racemosus*. (Liliaceae)
Local name: Shatavari.
Habitat: Found in forest and at waste lands.
Edible part: It's available in all season and roots are edible as a vegetable.
12. *Azadiracta indica* A. Juss.(Meliaceae)
Local name: Nimboni
Habitat: Tree found inforest and as road side tree.
Edible part: Fruits are available in summer season, raw and fully ripe fruits are edible.
13. *Bauhinia perpurea* L. (Caesalpiniaceae)
Local name: Kanchan
Habitat: Trees arefound inforest areas and in Kitchen garden.
Edible part: Only young leaves are cooked as vegetable..
14. *Bauhinia racemosa* Lam, (Caesalpiniaceae)
Local name: Apta
Habitat: Trees of Bauhinia mostly grow at Forest areas in Rainy season.
Edible part: Leaves are cooked as vegetable.
15. *Baerhavia repens* L. (Nyctaginaceae)
Local name: Punarnava /Khaparkuti
Habitat: It is found in the field in the month of Sept- Nov as a weed.
Edible part: Young leaves are cooked as vegetable.
16. *Bombax ceiba* L (Bombaceae)
Local name: Katesavar
Habitat: Trees are mostly found in forest areas.
Edible part: Tuber is eaten as raw. Excessive consumption is hazardous to health.
17. *Buchananiaco chinchinesis*(Lour.) Almeida. (Anacardiaceae)
Local name: Chara
Habitat: Trees are found in forest areas.
Edible part: Seeds are used as additive in vegetables and soup.
18. *Cajamus scarabaeoides* L. Du Petit –Thou. (Fabaceae)
Local name: Rantur.
Habitat: Climber fount inforest area which is available in rainy and winter season.
Edible part: Young pods and seedsare cooked as vegetable.
19. *Canavalia gladiate* (Jacq) DC. (Fabaceae)

Local name: Abai.
Habitat: It is the climber available inforest areas and kitchen garden in Winter and Summer season.
Edible part: Young pods and seeds are cooked as vegetable.
20. *Canthium coromandelicum* (N.Burm.) Alst.(Rubiaceae)
Local name: .Karbit
Habitat: Shrub grows in forest areas in the month of April – August.
Edible part: Fruits are eaten raw.
21. *Capparis zeylanica* L. (Capparaceae)
Local name: Vaghati /Orkali
Habitat: Climber grows in forest hilly areas..
Edible part: Fruits are cooked as vegetable.
22. *Cassiatora* L. (Caesalpiniaceae)
Local name: Tarota.
Habitat: Herb found in waste land, mostly in winter season.
Edible part: Young leaves are cooked as vegetable..
23. *Cassia fistula* L (Caesalpiniaceae)
Local name: Amaltas, Bhava
Habitat: Tree is found in forest area in April- June.
Edible part: Pods and flowers are cooked as vegetable.
24. *Cassia mimoesides* L. (Caesalpiniaceae)
Local name: Lajari
Habitat: It grows inforest area in the rainy and winter season as weed..
Edible part: Pods are cooked as vegetable.
25. *Ceropegia bulbosa* Roxb (Asclepiadaceae)
Local name: Suparikanda
Habitat: Climber is found in forest area in rainy and winter season.
Edible part: Tuber is edible as vegetable.
26. *Clerodendrum seratum* L. Moon (Verbenaceae)
Local name: Bharangi
Habitat: shrub is common in forest area.
Edible part: Young leaves are cooked as vegetable.
27. *Coccinia grandis* L.Voigt.(Cucurbitaceae)
Local name: Tondali
Habitat: Climber is grown along hedges..
Edible part: Fruits are cooked as vegetable.
28. *Colocasia esculenta* L.(Araceae)
Local name: Kochai
Habitat: This is herb cultivated in kitchen garden.
Edible part: Tuber and leaves are cooked as vegetable.
29. *Alocasia macrorhiza*(L.) G.Don.. (Araceae)
Local name: Dhopa
Habitat: This plant is obtained fromwater bodies or from stagnant water.
Edible part: Leaves are used for vegetables.
30. *Commelina benghalensis* L. (Commelinaceae)
Local name: Kena
Habitat: This plant is found along road side and river banks. It is common in rainy season.
Edible part: Young leaves are eaten as vegetable.
31. *Corchorus capsularis* L (Tiliaceae)
Local name: Chunch
Haitat: This plant is found near Villages. Its availability period is June to Sept.

Edible part: Young leaves are edible and cooked as vegetable.
32. *Cordia dichotoma* Forst.f.(Boraginaceae)
Local name: Bhokar
Habitat: Tree isfound in Forest area.
Edible part: Fruits are edible after cooking or in some region pickle is prepared.
33. *Costus speciosus* (Koen) J.E. Smith..(Zingiberaceae)
Local name: Harduli
Habitat: Herb grows in forest area. It is available in rainy season .
Edible part: Tubersare cooked as vegetable.
34. *Curculigo orchioides* Gaertn (Hypoxidaceae)
Local name: Kali Musali.
Habitat: Herb type found in forest area.
Edible part: During rainy season tuber is cooked as vegetable.
35. *Dendrocalamus strictus*(Roxb) Nees. (Poeceae)
Local name: Vaste
Habitat: Grass type grown in forest area.
Edible part: Young shoots cooked as vegetable.
36. *Dentella repens*(L.) J.& G. (Rubiaceae)
Local name: Kadubhaji
Habitat: Herb found on marshy land of ponds during September to November.
Edible part: Leaves are cooked as vegetables.
37. *Dioscoriabulbifera* L (Dioscoreaceae)
Local name: Mataru
Habitat: Climber is found in forest area and kitchen garden
Edible part: It is available in rainy season and tuber is cooked as vegetable.
38. *Dioscoriapentaphylla* L. (Dioscoraceae)
Local name: Shendvel
Habitat: Climber grows at Forest area andcultivated in Kitchen garden.
Edible part: It grows in rainy season. Inflorescence and tuber is cooked as vegetable.
39. *Diplocyclospalmatus* L. Heffrey (Cucurbitaceae)
Local name: Ghungarubhaji/ Shivling
Habitat: Climber is found on fences near villages as weed..
Edible part: Young leaves and stem were cooked as vegetable.
40. *Emblica officinalis* Gaertn (Euphorbiaceae)
Local name: Awala.
Habitat: Tree is found in forest areas.
Edible part: Mature fruits are edible as raw or after drying.
41. *Ficus racemosa* L..(Moraceae)
Local name: Umbar.
Habitat: Tree is found in forest and waste land. .
Edible part: Ripe fruits are eaten as raw.
42. *Glycosmis pentaphylla* (Retz) DC (Rutaceae)
Local name:
Habitat: Climbing shrub found in forest area during Oct- May.
Edible part: Fruits are cooked as vegetables.
43. *Grewia asiatica* L (Tiliaceae)
Local name: Goyalipala
Habitat: Shrub grows frequently in Hilly areas..
Edible part: Fruits are cooked as vegetable.
44. *Holarrhena pubescens* (Buch-Ham) Wall.exG.Don. (Apocynaceae)

Local name: Pandhrakuda.
Habitat: Shrub found in winter seasoninforest area
Edible part: Flowers are cooked as vegetable..
45.*Indigofera glandulosa* Wendl. (Fabaceae)
Local name: Barbath.
Habitat: Herb found in agriculture field as weed.
Edible part: It is available inrainy and winter season andyoung leaves are cooked as vegetable.
46.*Ipomoea muricata* Jacq (Convolvuluceae)
Local name: Bhovara
Habitat: Climber grows as weed along fences in villages.
Edible part: Its availability is in the month of Aug- Nov. Fruits are edible.
47.*Leea asiatica* (L.) Ridsd (Leeaceae).
Local name: Deenda.
Habitat: It is a shrub found in forest area.
Edible part: Young leaves are cooked as vegetable.
Mature leaves are not edible.
48. *Limonia acidiccima* L. (Rutaceae)
Local name: Fetra
Habitat: Tree is cultivated on bunds.
Edible part: Fruitsare cooked as vegetable.
49.*Madhuca longifolia* (Koen .)Macbr.(Sapotaceae)
Local name: Moha
Habitat: Tree grows in forest area..
Edible part: Young fruits and flowers are cooked as vegetable.
50 *Maesa indica* (Roxb) DC..(Myrsinaceae)
Local name: Jinjurali/ Ambatbindukali
Habitat Shrub usually occur in forest area.
Edible part: Leaves are cooked as vegetable.
51. *Morinda pubescens* J.E.Sm. (Rubiaceae)
Local name: Bartondi/ Nonifal
Habitat: Trees are observed frequent along roadside .
Edible part: Fruits are ripening in June to Sept Fruits are edible and cooked as vegetable.
52. *Mucunapruriens* L. DC. (Fabaceae)
Local name: Khajkoyali.
Habitat: Climbers are observed in forest area
Edible part: Pods are eaten as vegetable.
53. *Nelumbonucifera*Gaernt (Nelumbaceae)
Local name: Kamal.
Habitat: It is a aquatic plant found in Lakes and Ponds.
Edible part: Thalamus of this plant is eaten raw.
54. *Olax imbricate* Roxb. (Olacaceae)
Local name: Aratpari
Habitat: It is a climber found in forest areas.
Edible part: Young leaves are cooked as vegetable..
55. *Oroxylon indicum* (L.) Vent. (Bignoniaceae)
Local name: Tetu
Habitat: Tree found in forest area.
Edible part: Young pods are used to prepare vegetable,
56. *Phoenix sylvestris* (L.) Roxb. (Arecaceae)
Local name: Sindi

Habitat: It is called as Silver date palm. It is observed in Forest opening, Field boundaries, Pond boundaries..
Edible part: Ripe fruits eaten as raw. Sago is produced by incision in inflorescence. The treeis tapped to make a toddy or palm wine.
57. *Phyllanthus amarus* Schum and Thonn (Euphorbiaceae)
Local name: Bhuiavala
Habitat: Herb found in field during rainy and winter season as weed.
Edible part: Fruitsare eaten raw.
58. *Physalis minima* L (Solanaceae)
Local name: Kapalphodi
Habitat: Herbs occur as weed near bunds..
Edible part: Fruits are edible and eaten as raw or cooked as vegetable.
59. *Portulaca oleracea* Linn.(Portulaceae)
Local name: Gholbhaji.
Habitat: Weed in agricultural fields.
Edible part: Whole plants are cooked as vegetable.
60. *Puerariatuberosa* (Roxb.ex.wild) DC (Fabaceae)
Local name: Davankanda/ Pithana
Habitat: Climber is found in forest area throughout the year .
Edible part: Tuber is cooked as vegetable and roasted
61. *Rhynchosia minima* (L.) DC.(Fabaceae)
Local name: Chipali.
Habitat: Climber is observed in open grass land during August- November.
Edible part: Pods are cooked as vegetable.
62. *Amorphophallus konkanensis* Hett. Yadav and Patil (Araceae)
Local name: Bhasmakanda
Habitat: Herbsare observed in forest area during rainy season.
Edible part: Tubers and leaves are cooked as vegetable.
63. *Scilla hyacinthine* (Roth.) Mc. Bride. (Liliaceae)
Local name: Kapuskanda/ Shakkarkanda
Habitat: Herbs are observed in rainy season usually inforest area.
Edible part: Tubers cooked as vegetable.
64. *Semecarpus anacardium* L.f.. (Anacardiaceae)
Local name: Biba
Habitat: Trees are observed in forest area
Edible part: Fleshy edible orange coloured thalamus is edible.
65.*Solena amplexicaulis* (Lam.) Gandhi (Cucurbitaceae)
Local name: Gometi.
Habitat: Climbers are observed near stream in the month of June – Sept.
Edible part: Fruits are edible or cooked as vegetable.
66. *Tamarindusindica* Linn (Caesalpinnaceae)
Local name: Chincha.
Habitat: Trees are observed in forest and roadside.
Edible part: Whole plant parts are edible like young leaves, flower, young fruit, ripe fruit, seeds. Pulp extract isused along with vegetables and pulses. Seeds are roasted and eaten as Supari.
67. *Tamilanadia uliginosa* (Retz.) Triveng and Sastry (Rubiaceae)
Local name: Pendhar.
Habitat: Middle size tree is observed in forest area.
Edible part: Fruits are used to prepare vegetable and pickle.
68. *Terminalia cuneata* Roth (Combretaceae)

Local name: Arjun.
Habitat: Trees grow in forest area near water streams.
Edible part: Fruits are cooked as vegetable.
69. *Theriophonum indicum* (Dalz.) Engler (Araceae)
Local name: Undirkani
Habitat: Herbs are observed in forest area duringrainy season.
Edible part: Young leaves and stems are cooked as vegetable.
70. *Trapanatans* Linn.(Trapaceae)
Local name: Shingada.
Habitat: It is aquatic plant observed in ponds and water bodies.
Edible part: Seed is eaten raw or cooked. It has high market value collected by local people and sold in villages.
71. *Tricodesma indicum* Lehm (Boraginaceae)
LocaIname: Phopati
Habitat: Herb observed along road side in the month of Aug- Nov.
Edible part: White fruits are eaten raw and juice is prepared and used as medicine.
72. *Wrightia tinctoria* R.Br. (Apocynaceae)
Local name: PandhraKuda
Habitat: Tree is observed in Forest area.
Edible part: Flowers are cooked as vegetable.
73. *Zizipus oenoplia* Linn. Mill (Rhamnaceae)
Local name: Yeroni
Habitat: Tree is observed at forest openings.
Edible part: Fruits are eaten raw. Fruits ripen in summer and winter season.

RESULTS AND DISCUSSION

Tribals and the affected population had to find out non-conventional wild food plant species. The aim of such species is to supplement food or to depress the hunger due to its consumption. Unripe fruits of Arogyappacha (*Tricopuszeylanicus*) are eaten by Kani tribe to remain healthy and agile during their long tracking trips in the high mountainous forests of Agasthyar hills in Kerala. Kani tribals claim that one can live energetically without food for long days and perform rigorous physical work after consumption of a few fruits of this plant daily (Pushpangadan *et al.*, 1988).

Tribal communities consume wild tubers, rhizomes and corms either in raw or baked or boiled or roasted form. Tender shoots, flowers, leaves, pods, young fruits, etc. Efforts were also made to explore the nutritive potential of wild edible tubers, rhizomes, leafy vegetables and wild fruits which supplement several nutrients particularly calcium and carotenoids. Such unconventional wild edible plants are sources of fats, proteins , rich source of micro-nutrients and trace elements (Nilegaonkar *et al.*, 1985; Kulkarni *et al.*, 2003, Kulkarni, 2006).

In the present study documentation of non-conventional food resources consumed by Rajgondtribe plays a significant role in sustainable food security. Data of wild plants showed that 28 wild fruits, 22 leafy vegetables, 9 tubers, 6 flowers, 4 seeds, 3 whole plants, 2 stem and 2 thalamus are consumed either in monsoon season or rest of seasons of the year.

Tribals are collecting mushrooms and drying them for future use. Some toxic plants are consumed with a special method for removing toxic chemicals. In their kitchen garden they grow vegetables, tubers, beans and chillies, etc. (Kulkarni and Kumbhojkar, 1993). The diversity of these plant resources needs to be documented and analysis should be done for their nutritional values. During field visits, it was observed that wild plant seeds are not procured by tribal people for further cultivation practices or domestication. Special efforts are required to be carried out for collection of seeds during proper season and domestication at *ex-situ* at village level. It will be a good supply of traditional food resources to mal-nutritious women, boys and old people. .

Generally wild edible plants show natural variability. The nutritive values of the wild edibles are good. In many cases, nutritive values of non-conventional foods are superior to conventional food resources (Agrahar-murugkar and Subbulakshmi, 2005). Germplasm collection of these wild plants will be a key role in finding a superior genotype for modern agricultural and horticultural practices (Kulkarni, 2007). In view of this the research programme is established by the Council of Scientific and Industrial Research (CSIR) in our country. The aim of the project is to position Indian nutraceuticals and nutragenomics on the global platform (Varshney, 2005). Under this programme, the research organizations will contribute in germplasm collection and further studies on proximate chemical analysis of wild plants. This work will be useful to determine future nutraceuticals, which will be helpful to maintain health of mankind.

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