

Indigenous wild edible fruits for Kom tribe in Manipur, India

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Abstract

A study recorded 36 species of wild edible fruit plants belonging to 26 families used in various ways by the Kom tribe. This present work is the outcome of 4 field studies carried out in different parts of Kom inhabitant districts- Churachanpur, Chandel, Senapati and Imphal East. The Kom is one of those recognized scheduled tribes of Manipur who has acquired a good knowledge about the uses of wild edible fruits. Record of uses like *Phyllanthus acidus* (Linnaeus) Roxburgh, *Docynia indica* (Wallich) Decaisne, *Antidesma bunius* (Linnaeus) Sprengel, *Myrica farquhariana* Wallich, etc. is interesting. Most of the 36 species of wild edible fruit plants species reported in this paper form a significant component of the economic life of locals.

Key words: wild edible fruit, Kom tribe, Churachandpur, Chandel.

INTRODUCTION

Manipur lying in the Indo-Burma Biodiversity Hotspot and ranks in the 8th amongst the 35 biodiversity hotspots recognized by IUCN round the world. This holds immense potential for occurrence and cultivation of wide range of wild edible fruit plants. Manipur is inhabitant by different ethnic groups. Kom tribe belongs to the old Kuki tribe. They are settled in four districts districts of Manipur, - Churachandpur, Chandel, Senapati and Imphal East. Their population in the year 2001 was 16,463 (Anonymous 2001). They are primarily dependent upon local vegetation for their sustenance. They use different type of plants for their various day to day needs like medicine, food, fuel, timber, etc. to sustain their livelihood linked with agriculture. Kom tribe has acquired good knowledge about the uses of wild edible fruits. Collection of wild edible fruits has been carried out by the villagers as a way of life along with the cultivation of some plants. The Kom tribe belongs to the lowest stratum of the society and their socio-economic condition is very poor. They have no purchase power so they can't buy cultivated fruits from the market. Instead, they collect different types of fruits and other plant parts from the wild and consume. These also generate some income for them as they sale out the excess collection. Singh & Singh (1985) and Singh *et al* (1988) reported that the people of Manipur have a tradition to use wild plants as the state is predominantly inhabited by the indigenous people. The natives of the area still gather wild food plants (Arora 1981). Unsustainable ways of harvesting and unrestricted marketing of these plants have led to the reduction in population of some high valued wild edible fruit plants. But we should always remember that these wild fruits in proper combination can meet all our nutritional needs so that the inhabitants are living healthy. This paper deals only the preliminary report and leaves room for further scientific study.

MATERIALS AND METHODS

Field survey was conducted in different areas of Kom inhabitant districts, namely Churachandpur, Chandel, Senapati and Imphal East during 2009 – 2010 to collect information about the wild edible fruits. In this study the method of Singh & Singh (1985) and Singh *et al* (1988) were adopted. Plants were identified with the help of published literature (Deb 1961; Bentham & Hooker 1862 – 1883; Kanjilal *et al* 1934 – 1940; Das *et al* 1968; Hooker 1872 – 1897; Arora 1981). The specimens are deposited in the Herbarium of the Department of Ecology and Environment Science, Assam University, Silchar.

RESULTS

In the present paper, Botanical names of recorded wild edible fruit plants are arranged alphabetically along with their families, Exsiccatae, local names, references to voucher specimens, and uses are presented in tabular form [Table 1].

Table1. Wild fruit plant used in various ways by the people of Kom tribe in Manipur

Name [Family]; Exsiccatae	Vernacular Name	Part Used	Mode of use
<i>Antidesma bunius</i> (Linnaeus) Sprengel [Fabaceae]; Resh 002503	<i>Theiyong</i>	Ripe fruits, tender leaves	Eaten raw, cooked as vegetable
<i>Aphanamixis polystachya</i> (Wallich) R.N. Parker [Meliaceae]; Resh 002505	<i>Heirangkhoi</i>	Ripe Fruits	Eaten raw
<i>Artocarpus lakoocha</i> Roxburgh [Moraceae]; Resh 002530	<i>Keitaat</i>	Ripe Fruits	Eaten raw, cooked as vegetable
<i>Averrhoa carambola</i> Linnaeus [Averrhoaceae]; Resh 002508	<i>Theikarher</i>	Ripe Fruits	Eaten raw, cooked as vegetable
<i>Baccaurea sapida</i> Mueller-Argoviensis [Euphorbiaceae]; Resh 002520	<i>Moto-khei</i>	Ripe Fruits	Eaten raw
<i>Calamus tenuis</i> Roxburgh [Arecaceae]; Resh 002527	<i>Teengpira</i>	Ripe Fruits	Eaten raw
<i>Castanopsis armata</i> Spach [Fagaceae]; Resh 002537	<i>U- Thangjing</i>	Nuts	Roasted nuts are eaten
<i>Citrus australis</i> Linnaeus [Ulmaceae]; Resh 002532	<i>Heikreng</i>	Young leaves, Ripe Fruits	Used in fresh, mixed vegetable salad, eaten raw
<i>Citrus macroptera</i> Montrous [Rutaceae]; Resh 002542	<i>Sorom</i>	Juicy sac, rind of fruits	Eaten fresh, spice
<i>Citrus medica</i> Linnaeus [Rutaceae]; Resh 002512	<i>Masir</i>	Juicy sacs in fruits	Eaten fresh
<i>Dillenia indica</i> Linnaeus [Dilleniaceae]; Resh 002546	<i>Heigri</i>	Leaves, fleshy acresent calyx	Decoction as medicine, eaten raw
<i>Docynia indica</i> (Wallich) Decaisne [Rosaceae]; Resh 002553	<i>Theitup</i>	Fruit	Ripe and unripe fruits are eaten
<i>Elaeagnus conferta</i> Roxburgh [Elaeagnaceae]; Resh 002527	<i>Heiyei</i>	Fleshy part of fruit	Ripe fruits eaten raw
<i>Elaeocarpus floribundus</i> Blume [Elaeocarpaceae]; Resh 002551	<i>Zorphon</i>	Ripe /unripe fruit	Eaten raw, roasted or cooked
<i>Ficus cunia</i> Buchanon-Hamilton [Moraceae]; Resh 002513	<i>Theichang</i>	Ripe Fruit	Eaten raw
<i>Ficus glomerata</i> Roxburgh [Moraceae]; Resh 002555	<i>Theibong</i>	Ripe Fruit	Eaten raw
<i>Ficus pomifera</i> Wallich <i>ex</i> King [Moraceae]; Resh 002543	<i>Bajil</i>	Ripe Fruit	Eaten raw

Name [Family]; Exsiccatae	Vernacular Name	Part Used	Mode of use
<i>Flacourtia jangomas</i> (Loureiro) Raeschel [Flacourtiaceae]; Resh 002518	<i>Theitung</i>	Fleshy part of fruit	Eaten raw
<i>Garcinia pedunculata</i> Roxburgh ex Buchanon-Hamilton [Clusiaceae]; Resh 002554	<i>Heibung</i>	Fleshy part of fruit	Eaten fresh, cooked as curry
<i>Grewia abutilifolia</i> Ventenat ex Jussieu [Teliaceae]; Resh 002521	<i>Ching-boroi</i>	Ripe Fruit	Eaten raw, boiled extract in medicine
<i>Myrica farquhariana</i> Wallich [Myricaceae]; Resh 002535	<i>Nongang-hei</i>	Ripe Fruit	Eaten fresh or make into pieces to make local liquor
<i>Passiflora edulis</i> Sims [Passifloraceae]; Resh 002530	<i>Krapolthei</i>	Ripe Fruit and tender twigs	Leaves and fruits eaten raw; tender twigs as vegetable and as medicine for diabetes
<i>Phoenix sylvestris</i> (Linnaeus) Roxburgh [Arecaceae]; Resh 002557	<i>Thangtup</i>	Fleshy part of fruit	Mature fruits eaten raw
<i>Phyllanthus acidus</i> (Linnaeus) Roxburgh [Euphorbiaceae]; Resh 002541	<i>Gihori</i>	Fleshy part, leaves	Ripe fruits eaten raw; leaves antidote to snake-bite
<i>Phyllanthus emblica</i> Linnaeus [Euphorbiaceae]; Resh 002560	<i>Sulhu</i>	Fleshy part of fruit	Fruits eaten raw, pickled; prepare local hair lotion (<i>Chinghi</i>)
<i>Prunus armeniaca</i> Linnaeus [Rosaceae]; Resh 002526	<i>Monhei</i>	Fleshy part of fruit	Ripe/unripe eaten raw
<i>Prunus cerasiodes</i> D. Don [Rosaceae]; Resh 002542	<i>Wild Cherry</i>	Fleshy part of fruit	Ripe fruits eaten raw
<i>Prunus domestica</i> Linnaeus [Rosaceae]; Resh 002549	<i>Theikha</i>	Fleshy part of fruit	Ripe/unripe eaten raw
<i>Prunus persica</i> (Linnaeus) Batsch [Rosaceae]; Resh 002516	<i>Chumpri</i>	Fleshy part of fruit	Ripe/unripe eaten raw
<i>Rhus elliptica</i> Thunberg [Rosaceae]; Resh 002559	<i>Theiker</i>	Berries	Ripe fruit eaten raw
<i>Rhus javanica</i> Linnaeus [Anacardiaceae]; Resh 002504	<i>Khonghma</i>	Tender leaves, Flowers, ripe fruit	Salad (<i>Singju</i>), eaten fresh or powdered
<i>Spondias pinnata</i> (Linnaeus) Kurz [Anacardiaceae]; Resh 002525	<i>Tito</i>	Ripe fruits, Bark	Eaten fresh, pickled and in medicine
<i>Tamarindus indica</i> Linnaeus [Caesalpiniaceae]; Resh 002533	<i>Mangke</i>	Pulp of ripe fruits	Eaten raw, cooked as curry " <i>Hei-thongba</i> "
<i>Tetrastigma bracteolatum</i> Planchon [Vitaceae]; Resh 002556	<i>Monjam-hei</i>	Ripe fruits and tender leaves	Eaten raw, cooked as vegetable
<i>Vangueria spinosa</i> Roxburgh [Rubiaceae]; Resh 002520	<i>Theipui</i>	Fresh and tender leaves, fleshy part of ripe fruits	Leaves used for making <i>Singju</i> , ripe fruits eaten raw, used as body lotion
<i>Ziziphus jujuba</i> Miller [Rhamnaceae]; Resh 002523	<i>Boroi</i>	Fleshy part of ripe/unripe fruits	Eaten fresh, pickled

DISCUSSION

Most of the 36 species of wild edible fruit plants reported in this paper form the significant component of the economic life for the people of Kom tribe. Use of some little known wild fruit species like *Phyllanthus acidus*, *Docynia indica*, *Antidesma bunius*, *Myrica farquhariana* etc. is interesting. As the wild fruits are the favourite food of the Kom tribe, it may be encouraged in the consumption of these fruits by other tribes and communities. Fruits of some plants like *Spondias pinnata*, *Rhus javanica*, *Phyllanthus acidus*, *Dillenia indica* and *Garcinia pedunculata* have high medicinal value and are used extensively by Kom tribe. The rind of the fruits of *Citrus macroptera*, which is one of the most favorite spice, commonly used in every delicacies of the Kom tribe. The juicy extract of *Calamus tenuis*, *Citrus medica*, *Myrica farquhariana* and *Prunus domestica* are much preferred by the Kom community as refreshing drink. Fruit curry (*Hei-thongba*) which a slightly sour-preparation, a dish in grand feast is prepared from the four fruits viz., *Artocarpus lakoocha*, *Averrhoa carambola*, *Garcinia pedunculata* and *Tamarindus indica*. There is no doubt that the edible wild fruits influenced the living style of the Kom people. Some of these wild edible fruit plants such as *Dillenia indica*, *Spondias pinnata*, *Phyllanthus acidus*, *Citrus macroptera* can be grown for mass production so as to improve the economic condition of the tribe, as these fruits are of high demand in the markets of Manipur. Attention need to be paid for the collection and conservation of germplasm of such taxa. Additional studies in near future, about the nutritional and public awareness program regarding the wild edible fruits are worth to be mentioned.

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