

WILD VEGETABLE SPECIES COMMONLY CONSUMED BY TRIBES OF CHAKRATA

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Introduction

The natural resources in the world over have their influence on the socio-economic as well as cultural, religious net work of the human society. Indian society, divided in urban, rural and tribals categories, still have relatively low to high dependence in the natural resources. The tribal population is much closed to nature and they are the richest repository of accumulated experience and knowledge on natural resources. Their culture, religious sites, taboos, legends and myths, witchcraft food and medicinal practices are greatly influenced by wild natural plants growing in their neighborhood. Many plants traditionally used for food are important sources of chemically active compounds, that are required by the body. The phytochemistry of such plants may help in finding new resources for their commercial use in near future. This paper is an attempt to highlight some lesser known wild plants used by locals for their daily requirements of vegetable.

Study Site

The study was conducted in the tribal area of Chakrata that comes under Chakrata forest division in Tons circle. The study area is situated between the 20° 26' N and 31° 2' N and longitude 77° 38' E and 78° 4' E. It is bounded by Tons Forest Division in north, Yamuna Forest Division in east, Yamuna river in south and Tons river in west interstate boundary with Himachal Pradesh. The area lies in lesser Himalayan ranges at the Western end of Central Himalayas. The whole terrain is mountainous and is broken by numerous streams and Nales, presenting a very rugged configuration. The peoples of villages are tribals and are locally called Jaunsaris. There are dense forests around the Jaunsar-Bawar. Several wild plant species are used by tribal peoples for various purposes. The mountainous terrains of Chakrata reveals variable climate owing to physiographical factors. The topography of the area shows great variation in the elevation and slope steepness that produces marked local effects due to difference in solar insulation.

Methodology

Exhaustive plant collection from all the altitudes and ranges was done. The species mentioned here for use as vegetable are also consumed by the authors during their trips in the area. Plants were collected with

all the details from the locals and then identified in DD and BSD and with the help of floras by Duthie (1906), Babu (1977), Kanjilal (1901) and Gaur (1999).

Result

Plants collected

Angelica glauca Edgew.

Vernacular name: Churei, Churoi.

Ethnobotanical uses: Roots are dried to make powder and this powder is used as flavouring agent.

Consumption Method: *Angelica glauca*: The roots of the plants are collected and dried and then grind. Powder of this root is used as flavouring agent in pulses and non-veg. dishes

Arisaema intermedium Blume

Vernacular Name: Jhamush, Chamush.

Annual-perennial, tuberous herb, leaf stalk 30-50 cm long. Leaves – usually digitately tri-foliate, leaflet sessile, ovate. Flower – spathe pale of yellowish green, apex long pointed, spadix appendage prolonged, long tail, curved upwards.

Rare in open moist places. Kanasar, Mundhol.

Ethnobotanical uses: Leaves and leafstalk used as vegetable.

Consumption Method: The leaves and leafstalk are collected and are boiled with *Rumex hastatus* and then are cooked.

Bauhinia variegata L.

Vernacular Name: Goral, Goryal.

Large tree upto 20 m high. Bark – dark brown. Leaves – subcoriaceous, cordate at base. Flower – white or purplish.

Found in open condition. Sarlala, Tiuni.

Ethnobotanical uses: Young flowers used as vegetable and pickle.

Consumption Method: The young flowers of the tree are collected and are boiled with water and fried. The pickle is also prepared from the flowers.

Bidens biternata (Lour) Merr. & Sherff.

Vernacular Name: Kumra, Shangunia

Annual, erect herb upto 1 m high. Stem – four-

angled, glabrous, herbaceous. Leaves – Opposite, pennate with two sub opposite pairs of lateral leaflets, glabrous. Flower – Head yellow, radiate, outer involucre ciliate, inner non-ciliate.

Found in open fields. Sawara, Tiuni, Ninus, Kathiyan.

Ethnobotanical uses : Leaves are used as vegetables.

Consumption Method: The leaves of the plant are collected and are cooked like normal vegetable.

***Diplezium polypodies* Bl.**

Vernacular Name: Lenguda.

Ethnobotanical uses: The young fern is used as vegetable.

Consumption Method: It is very popular vegetable among the villagers. The whole fern is collected and cut into small pieces and then cooked.

***Euphorbia heteroohylla* L.**

Vernacular Name: Doodla.

Annual, erect herb upto 1 m high with whitish latex. Stem – fistular, ribbed. Leaves – alternate or sub-opposite in upper part, variable in shape. Flower – Yellowish in terminal cluster. One conspicuous lateral gland.

Found in open cultivated and waste land. Sawra, Sarlala. Dungri, Tiuni.

Ethnobotanical uses : Leaves are used as vegetable.

Consumption Method: Leaves and stem of the plant are collected and then cooked.

***Fagopyrum esculentum* (L.) Moench**

Vernacular Name: Fafri.

Annual erect, glabrous herb upto 30 to 70 m high. Stem – somewhat brown, succulent. Leaves broadly triangular, base cordate, entire. Flower – bisexual, pink to white in axillary and terminal cymes.

Found in cultivated and waste land. Chakrata, Jadi, Chandni.

Ethnobotanical uses : Leaves are used as vegetable by locals.

Consumption Method: Leaves are collected and are cooked.

***Ficus palmata* Forssk.**

Vernacular Name: Feru.

Deciduous tree upto 12 m high. Bark smooth, grey, young part tomentose. Leaves – alternate, broadly ovate, dentate, palmately lobed. Flower – stalked, axillary, pyriform. Reported from Chakrata, Tiuni, Mundhol, Sahiya, Kanasar.

Ethnobotanical uses : Young twigs are used as vegetable,

fruit blackish, edible.

Consumption Method: The young twigs are collected and washed and then are cut into small pieces and cooked without adding of water.

***Gerbera gossypina* (Royle) G. Beauv**

Vernacular Name: Kupad.

Perennial, wooly tomentose herb with creeping, rhizomatous base, covered with persistent leaf base. Leaves – Radical, obovate-lanceolate, rough, glabrous above, white wooly beneath. Flower – Head solitary, terminal, pink-white. Pappus – whitish, flattened.

Found in shady places, rocky slopes. Sawra, Mundhol, Kathiyan, Kishori.

Ethnobotanical uses : Shepherds use the wool of lower surface of leaf to burn fire in forests.

Consumption Method: The shepherds collect the leaves of this plant and then separate the wool of the lower surface of the leaf. Then this wool is used to burn the fire with the help of small stone pieces.

***Indigofera atropurpurea* Buch.-Ham. ex Hornem**

Vernacular Name: Kathi.

Erect deciduous shrub upto 1-20 m high. Bark – rough. Leaves – long, opposite, pinnate, oblong to round. Flower – pink or purple, conspicuous, long racem with sterile scales at base.

Found in forests, grassy localities. Mundhol, Kanasar, Bagi, Sawra.

Ethnobotanical uses : Young flower used as vegetable and pickle.

Consumption Method: The young flowers of the plant are collected and boiled with water and then fried.

***Phytolacca acinosa* Roxb.**

Vernacular Name: Jadga, Jadgya.

Annual, perennial, glabrous herb upto 80 – 150 cm high. Stem – herbaceous, succulent, flashy, terete green. Leaves – estipulate, ovate-lanceolate, base cunate. Flower – Pale white, small, crowded in leaf opposed, found in open and shaded oak forest.

Reported in Kishori, Kanasar, Bagi.

Ethnobotanical uses : Leaves are used as vegetables.

Consumption Method: The leaves of this plant are collected and then are cut into small pieces and then are cooked single or along with *Diplezium* (Lenguda).

***Prinsepia utilis* Royle**

Vernacular Name: Bhekhal, Bhekoi.

Deciduous shrub upto 3.5 high. Stem – young branches green, armed with stout spines. Leaves-

lanceolate, serrate, apex acute. Flower – Pale white, tinged yellow in centre, axillary raceme.

Common in open and sunny conditions. Sarlala, Mundhol, Sawra.

Ethnobotanical uses : Seed oil edible.

Consumption Method: The ripened fruit are collected and are dried and then oil is extracted which is *edible*.

***Rhus parviflora* Roxb.**

Vernacular Name: Ninawa.

Evergreen shrubs or small tree up to 4 m. high. Young part covered with rusty tomentum, bark grey, smooth. Leaves – trifoliate, ovate, basal part entire, upper coarsely toothed, hairs on nerves beneath. Flower – pale green, small in terminal lax, rusty panicles. Fruit green drupe, pale-red or brown when ripened.

Ethnobotanical uses: The ripened fruit's powder is called Pithi. It is used with barley flour (Sattu).

Consumption Method: The ripened red fruits are dried and then grind to make powder. Which is used with barley flour (Sattu).

***Rumax hastatus* D. Don**

Vernacular Name: Almora.

Perennial erect herb or undershrub upto 30 – 120 cm high. Stem – pale grey, much branches. Leaves hastate, tri lobed, fleshy, glaucous. Flower – Polygamous, greenish, white in lax. Common on wasteland, reported

from Sawra, Makhti, Kalsi, Sahiya.

Ethnobotanical uses : The leaves are used to make sauce.

Consumption Method: The leaves are collected and washed and are grind with spices like coriander, chili, etc. and then are made into sauce.

***Salvia lanata* Roxb.**

Vernacular Name: Gani.

Perennial, white, wooly tomentose herb upto 30 cm high. Leaves – Radical, sessile, oblanceolate, crenate, white wooly-pubescent. Flower – blue in verticillate cyme, campanulate, sticky, glandular.

Found in open exposed grassy fields. Sawra, Sarlala, Mundhol, Ninus, Jadi.

Ethnobotanical uses : Young leaves are used as vegetables.

Consumption Method: The young twigs of the leaves are collected, washed and are cooked without addition of water.

***Stellaria media* (L.) Vill.**

Vernacular Name: Badiyala.

Annual, sub-erect herb. Stem – with a line of hair on one side, rooting at nodes. 10-60 cm tall. Leaves – Petiolate, upper one sessile, ovate. Flower – in auxiliary or terminal leafy-cyme, small white.

Found in waste and cultivated land. Sarlala, Tiuni, Ninus.

Table 1
Wild species used by tribal of Chakrata.

Botanical Name	Local Name	Family	Part used
<i>Angelica glauca</i> Edgew.	Churoi	Apiaceae	Root
<i>Arisaema intermedium</i> Bl.	Jhamush, Chamush	Palmaceae	Leaves and leaf stalk
<i>Bauhinia variegata</i> L.	Goral, Goriyal	Caesalpinaceae	Flower
<i>Bidens biternata</i> (Lour) Merril & Sherff	Kumra, Shangunia	Asteraceae	Leaves and twigs
<i>Diplezium polypodies</i> Bl.	Lenguda	Athyriaceae	Whole young fern
<i>Euphorbia heterophylla</i> L.	Doodla	Euphorbiaceae	Leaves and stem
<i>Fagopyrum esculentum</i> (L.) Moench.	Fafri	Polygonaceae	Leaves
<i>Ficus palmata</i> Forssk.	Feru	Moraceae	Young twigs, fruit
<i>Gerbera gossypina</i> (Royle) G. Beauv.	Kupad	Asteraceae	Leaves
<i>Indigofera atropurpurea</i> Buch. -Ham ex Hornem.	Kathi	Papilionaceae	Flower
<i>Phytolacca acinosa</i> Roxb.	Jadga, Jadgya	Phtolaccaceae	Leaves
<i>Prinsepia utilis</i> Royle	Bhekhal, Bhekoi	Rosaseae	Seed
<i>Rhus parviflora</i> Roxb.	Ninawa	Anacardiaceae	Fruit
<i>Rumax hastatus</i> D. Don	Almora	Polygonaceae	Leaves and twigs
<i>Salvia lanata</i> Roxb.	Gani	Lamiaceae	Leaves and young twigs
<i>Stellaria media</i> (L.) Villars	Badiyala	Carryophyllaceae	Whole young herb
<i>Urtica parviflora</i> Roxb.	Karla, Kushka	Urticaceae	Leaves and twigs

Ethnobotanical uses : Young herb is used as vegetable.

Consumption Method: The whole young plant is collected and cooked single or along with spinach or mustard.

***Urtica parviflora* Roxb.**

Vernacular Name: Karla, Kushka.

Perennial, erect, pubescent herb or shrub. Bark – fibrous. Stem – branched, branches covered with stinging bristles. Leaves Ovate, lanceolate, crenate-serrate. Flower – small pale green, clustered on spreading axillary paniculate cyme.

Found on wasteland, roadsides. Tiuni, Mundhol, Bagi, Kishori.

Ethnobotanical uses : Leaves are used as vegetables.

Consumption Method: The leaves and twigs of the plant

are collected and are boiled with rice and then are fried.

Discussion

Seventeen wild species are commonly used by local tribals at the various altitudes. The area has mostly rainfed agriculture and therefore the agriculture produce is restricted mainly to the cash crops of potato and rajma in the area. Among the horticultural crops apple orchard and walnut trees abound in the area. The consumed wild plants species as vegetable are mostly used by villagers in the remote area primarily due to non availability of popular vegetables and partially due to poor economic status. These species are routinely consumed by nomads like shepherds, gujjars and the local villagers during their temporary stay in apple orchards or during their seasonal migratory behavior in search of fodder for their cattle in high altitudes of the area.

SUMMARY

The Chakrata Forest Division is in Dehradun district. The locals of Chakrata are tribal and popularly known as 'Jaunsaris'. These people live in the small gathering near the forest and still depend on natural resources for their day to day need. A total of 17 plant species are recorded from the wilderness that are consumed by locals by directly collecting from the forests. Species like *Diplexium* has become so popular that it is routinely collected from the wild and sold in the nearby market. There are many other species which are used as vegetables, and few are used as spices and condiments. These include herbs, shrubs, trees and ferns. Parts of the plants are used as vegetables include stem, twigs, leaves etc.

Key words: Wild vegetable, Jaunsari's, Chakrata Forest Division, Tribals.

चकरौता की जनजातियों द्वारा सामान्यतया या खाई जाने वाली जंगली वनस्पति जातियां

विश्वम्भर जोशी व एस.पी. जोशी

सारांश

चकरौता वन मण्डल देहरादून जिले में पड़ता है। चकरौता के स्थानीय लोग आदिवासी हैं जिन्हें लोक में जौनसारी कहा जाता है। ये लोक छोटे-छोटे समूहों में वनों के निकट रहते हैं और अपनी दिन-ब-दिन जरूरतों के लिए अब भी प्राकृतिक संसाधनों पर निर्भर हैं। यहाँ जंगलों में मिलती 17 पादपजातियां आलेखित की गई हैं जिन्हें यहाँ के स्थानीय जन सीधे जंगल से संग्रह कर खाते हैं। *डिप्लेजियम* जैसी जातियां तो इतनी लोकप्रिय हो गई हैं कि इन्हें नित्य जंगलों से इकट्ठा करके पास के बाजारों में बेचा भी जाता है। बहुत सी पादप जातियां और भी हैं जिन्हें सब्जियों की तरह तथा कुछ को मसालों के रूप में उपयोग किया जाता है। इनमें शाक, क्षुप, वृक्ष और पर्णांग सम्मिलित हैं। पादपों के भाग भी सब्जी की तरह खाए जाते हैं जिनमें तना, टहनियां, पत्ते आदि आते हैं।

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