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GHENGTI- THE FERMENTED PLANT BEVERAGE OF THE TRIBAL FOLK IN CHAKRATA HILLS, WESTERN HIMALAYA, INDIA.

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ABSTRACT The Chakrata region in district Dehradun is a 'scheduled tribe' area(Jaunsar-Bawar) that lies in an altitudinal range of 405m-3069m in the Western Himalaya. Theinhabitants of the area are 'Jaunsari' people, majority of them still rely in traditional agriculture. During winters and any gathering of celebration, jaunsaris usually sit in a circle and enjoy local alcoholic beverage known as 'Ghengti' served by the lady of the host family.'Keem is the starter in the form of cakes made up of 16,9,8,2 and 1 roots, whole plants, leaves, bulbil and fruit respectively of the 36 plant species collected by the Jadayi. Fruit pulpresults in local fermented plant beverage Ghengti.

KEYWORDS: Keem, Ghengti, Jaunsar-Bawar, Jadayi.

INTRODUCTION

There are a number of communities in India who reside at hill and adopt many traditional methods for their joy and entertainment. The area of the Jaunsar-Bawar comes in district Dehradun, Uttarakhand, India. The people of the area are tribals and locally are known as 'Jaunsaris'.

Juansari people assemble in many traditional occasions like festivals, marriage etc. and enjoy local dishes for the occasion. In addition to this, they consume the local wine popularly known as 'Ghengti' to celebrate happiness, to cope with adverse climatic conditions prevailing in the area.

Ghengti is prepared by a complex process by the use of many different plant parts, but mainly root are used to make local wine. Locally Ghengti is also called 'Soor'.

Jaunsar-Bawar a vast tribal area is one of few remaining citadels of biodiversity in Western Himalaya. The natural resources of the area are under great stress due to ever increasing pressure by the tribals, developmental projects taken up by the local and state administration.

STUDYAREA

This study is a part of taxonomic explorations in Chakrata forests that are integrated parts of Jaunsar-Bawar. The study area is situated between the 30° 26' N and 31° 2' N and longitude 77° 38' E and 78° 4' E longitude. The area is highly varied in topography with an altitudinal range of 405m to 3069 m and a geographical area of 85953 hactares. It is bounded by Tons Forest Division in north, Yamuna Forest Division in east, Yamuna river in south and Tons river in west by inter state boundary with Himachal Pradesh.

The area lies in lesser Himalayan ranges Western Himalayas. The whole terrain is mountainous and is broken by numerous streams and Nalas, presenting a very rugged configuration. The entire area is declared as scheduled tribe and the tribals are locally called Jaunsaris.

METHODOLOGY

Exhaustive plant explorations from all the altitudes and ranges was done. Villagers living in remote areas have little access to urban areas and they rely more on their nature. Alcoholic consumption is common but it is locally prepared by the use of certain plant species . These species were collected with all the details from the area and then identified in DD and BSD and with the help of floras by Babu (1977), Kanjilal (1901) and Gaur (1999), Rana and Rao (2002).

PREPARATION OF GHENGTI:

The authors made the exhaustive collection of plant species. During the collection, we consulted the tribal people to know the method of preparing *keem* and observed that the people in general were not interested to share their secrets.

This method involves the two steps:

- (I) Preparation of Keem
- (II) Distillation of Ghengti

PREPARATION OF KEEM:

The starter of the Ghengti is known as 'Keem'. The different plant species are made in cake form. In this process, the tribals collect the different plant species during rainy season. The plant species used for preparing the keem are called *Jadiya* and the people involved in this process are called *Jadayi*.

About 8 kg of chopped fresh twigs of *Cannabis sativa*, approx. 5 kg. of *Sapindus mukorossi* and about 10-15 kg. of different plant species (as listed in the table 1) are dried in shade and powdered. This powder is mixed with Barley (*Hordeum vulgare*).

The mixture of above plant species is added to a sufficient quantity of Jarayas (infusioin of finely chopped leaves and tender parts of *Melia azadirach, Zanthoxylum armatum, Leucas lanata* and *Dicleptera bupleuroides*) in a big container for whole night and doughed into a cake of about 2-4 kg. Plate1 (A,B).

Many cakes are prepared by repeating this process round the year. Now these cakes are processed by placing them on plant bed made up of tender shoot of *Cannabis sativa* and *Pinus roxburghii*, alternatively between cakes in a closed room. This set up is allowed to remain for 24 days. On 25th day, the room is opened and cakes are put upside down, these cakes are air dried in open sun. Dried cakes are then used for the fermentation of liquor.

In all 36 plant speces are used in local beverage preparation. These include 7 trees; 16 shrubs; 10 herbs and 3 climbers (fig. 1). Various parts of the selected species are used for this. 16 plant species contribute root; 9 species contribute whole plant; 8 species contribute leaves; 2 plant species contribute bulbil and 1 plant species contributes fruit (fig. 2).

Interestingly 50% of the total species are annual and 50% are perennial (fig.3).

DISTILLATION OF THE GHENGTI-:

The raw material for the Ghengti consists of either fruits rich in sugar such as *Pyrus sativus* (Pears), *Pyrus mallus* (apple) or finger millet (*Eleusine corocana*). About 15 kg of fruit pulp or cooked rice, barley (*Hordeum vulgare*) and roasted cakes made from flour of the finger millet are kept in a big closed air tight container.

Now about 3 kg of jaggery and one-fourth of keem is added to it. This air tight vessel(locally called Bhatti) is closed appropriately and allow to warm. This mixture is left for fermentation. After 7-10 days fermentation is complete. This mesh is transferred to a metallic container. This wooden lid of a pitch has a pipe and also contains a metallic pot for cold water (Plate 2:A,B and plate3). Now this pot is put on fire, after few hours this is distilled. Ghengti is collected and allow to cold, and cold *Ghengti* is ready to use.

CONSUMPTION OF GHENGTI:

Ghengti is consumed by the tribals in many occasions, in the month of January, (they eat mutton throughout the whole month), at festivals and

in marriage etc.

The tribal people assemble and sit in a circle. Then Ghengti is poured in bowls (locally called katora) and then the head lady of the family serve it to all circled people (Plate 4).

Table 1: Plant species used for the preparation of keem

Botanical Name	Family	Vernacular	Part used
Dotanical Name	1 anniy	Name	Tart uscu
Achyranthes aspera L.	Amaranthaceae	Uang, Litchkuri.	Root
Adhatoda zeylanica Medik.	Acanthaceae	Banshoi.	Root
Dicleptera bupleuroides Nees.	Acanthaceae	Kathmul.	Whole plant
Artemisia	Asteraceae	Chhamar.	Root
roxburghiana Wall. ex Bess.	ristoraceae	Cimana.	rtoot
Arachne cordifoila (Decne.) Hurusawa.	Euphorbiaceae	Bharoi, Bhati.	Leaves
Euphorbia royaleana Boiss.	Euphorbiaceae	Suruath, Suroi	Root
Boerhavia diffusa L.	Nyctaginaceae	Patharchatta	Whole plant
Berberis lysium Royle.	Berberidaceae	Kashmal, Kashmoi.	Root
Cannabis sativa L.	Cannabaceae	Bhang.	Leaves
Carissa opaca Stapf ex Hanes.	Apocynaceae	Karonda.	Root
Callicarpa macrophylla Vahl.	Verbenaceae	Dahiya.	Whole plant
Vitex negundo L.	Verbenaceae	Suanei, Shuanoi.	Leaves
Cassia tora L.	Caesalpinaceae	Panvar	Whole plant
Indigofera heterantha Wall	Papilionaceae	Kathi, Torki.	Whole plant
Cinnamomum tamala (Buch Ham.) Nees. ex Eberm.	Lauraceae	Guladra	Leaves
Cissampelos pariera L.	Menispermaceae	Batao, Parh.	Root
Colebrookia oppositifolia Sm.	Lamiaceae	Bhirmoli.	Root
Leucas lanata Benth.	Lamiaceae	Bish-kopra.	Whole plant
Royalea cinerea (D. Don) Baill.	Lamiaceae	Karuon.	Whole plant
Cymbopogon martini (Roxb.) Wats.	Poaceae	Parhu.	Root
Datura stramonium L.	Solanaceae	Dhantra.	Leaves
Physalis minima L.	Solanaceae	Latkaniya.	Whole plant
Dioscorea bulbifera L.	Dioscoreaceae	Genthi.	bulbils
Ficus semicordata BuchHam. ex Sm.	Moraceae	Khanu.	Fruit
Geranium ocellatum Camb.	Geraniaceae	Nir-bishi, Laljhari.	Root
Parhtenocissus semicordata (Wall.) Planch.	Vitaceae	Dakh.	Whole plant
Melia azadirach L.	Meliaceae	Dekreon, Dekreoi.	Leaves
Punica granatum L.	Punicaceae	Dareon, Darmetu.	Root
Pinus roxburghii Sargent.	Pinaceae	Saral,Chirliata	Root
Rubus niveus Thunb.	Rosaceae	Acheon, Achoi.	Root
Rhus parviflora Roxb.	Anacardiaceae	Ninaw.	Root
Sapindus mukorossi Gaertn.	Sapindaceae	Arttu.	Leaves
Sygzium cumini L.	Myrtaceae	Jamnoi.	Bulbils

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Woodfordia fruticosa (L.) Kurz.	Lythraceae	Dahai.	Leaves	
Zanthoxylum armatum DC.	Rutaceae	Timur.	Root	
Ziziphus mauritiana Lam.	Rhamnaceae	Boiral, boiri,	Root	

 $Fig.\,1: Growth\,forms\,of\,Plant\,Species\,used\,in\,preparation\,of\,Soor$

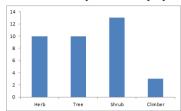


Fig. 2: Plant parts used in preparation of Soor

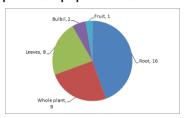
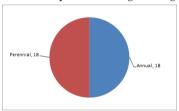


Fig. 3: Annual/Perennial species in making of Ghengti



 $Plate \ 3: Distillation\ process\ of\ Ghengti$



Plate4: Locals consuming the Ghengti during an occassion



(A)



(B)



Plate 1: (A, B): Starter of the Ghengti (keem)

(A)



(B)



Plate 2: (A, B): Extraction of Ghengti through furnace (bhatti)

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