



## A Study On The Preparation Technique Of Fermented Rice Beverages By The Thadou-Kuki Tribe Of Manipur

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**Abstract:** The present study provides information about the fermented rice beverages of the indigenous Thadou-Kuki tribes of Manipur along with its ethnomedicinal and cultural importance. The different types of fermented rice beverages were surveyed using questionnaires and documented. The present study reported the preparation technique and important used of the fermented rice beverages by the Thadou-Kuki tribes. These alcoholic rice beverages were consumed in different occasions like marriages, birth, death, ceremonial sacrifices and celebration of successful harvest and hunting besides festivals. The knowledge of these fermentation technique is handed down from generation to generation by words of mouth, and still remain alive as an oral tradition. Documentation and study of the cultural and ethnomedicinal uses of these fermented rice beverages and the preparation technology will be discussed in this paper.

**Keywords:** fermented rice beverages, traditional preparation, documentation, ethnomedicinal uses, cultural importance, Thadou- Kuki tribe, Manipur

### Introduction

The state of Manipur is inhabited by various ethnic communities with varied cultures, food habit and traditions. The different ethnic groups possess traditional ways of fermentation of foods and beverages according to their knowledge developed through ages. Fermented rice beverages Atingba (Jeyaram *et al.*, 2008) the local products of Manipur, and some fermented rice beverages of Northeast India, viz Chubitchi a traditional rice based alcoholic beverages of Garo tribes in Meghalaya (Mishra *et al.*, 2015), rice beverage popularly known as Choko or Jonga- mod by the Rabha tribe of Assam (Deka and Sarma, 2010), Sadhier or Kiad is a traditional rice beverage prepared by Pnar people in Jaintia hills of Meghalaya (Samati and Begum, 2007), Jou is a traditional alcoholic rice beverage prepared by Bodo tribe in Bodoland region in Assam (Basumatary and Gogoi, 2014), Zutho in Nagaland prepared by Angamis tribe (Teramoto *et al.*, 2002). Alcoholic beverages made up of rice are very common in almost all the festivals of the tribal people of North East India. Fermented rice beverages have also been considered as 'probiotic' due to various strains of lactic acid bacteria (LAB) and yeast present in it, which are often conceived to bear probiotic attributes (Park *et al.*, 2015). Several positive health benefits have been linked to fermented rice beverage. This may be due to the added medicinal plants/herbs that apparently increase the beverage's antioxidative potential and assist with the free radical disruption (Murugan *et al.*, 2018).

Inspite of the vast scope of the ethnobotanical studies, no documentation work has been taken up on the fermented rice beverages preparation of the Thadou-kuki tribes. Thus, the present study is taken up with the aim to document and conserve the traditional knowledge for the younger generations.

### Methodology

#### Survey

The study was carried out in four districts of Manipur; Churachandpur, Tengnoupal. Chandel and Kangpokpi where the Thadou-Kukis are inhabited in large number. The survey was carried out during August 2022 to May 2023. Five villages from each district were selected for the study. Selected villages were Molnom, Teiseng, Songpi, Zalenphai and S Molcham from Churachandpur district; Sapormeina, G.Kholep, N.Songlung. Haipi and Motbung from Kangpokpi district; Aigejang T. Phaicham, Tuinou, Longja and Molphei from Chandel district, also five villages namely Sita, Sinam, Molnoi, H. Mongjang and New Leikot from Tengnoupal district of Manipur. Permission was obtained before the survey from the village authorities. From each village ten individuals from selected households were interviewed by using pre structured questionnaires. The respondents consisted of 80 male and 120 female between the age group of 25 -60 years. They were mainly selected based on the individual experiences on the knowledge of different methods of brewing rice beverages, as informed by the villagers. Photos were taken of the raw materials and step-by-step procedure of the preparation technique used for the fermentation was noted down. The ethnomedicinal uses and the social cultural importance of fermented rice beverages were also recorded.

#### About the Thadou- Kuki

The Thadou-Kuki tribe is one of Manipur's Scheduled tribes, dominantly inhabiting the state's hills district (viz., Tengnoupal, Churachandpur, Chandel and Kangpokpi) with a total population of about 1,90,595, i.e., about 7.42% of the total state population (Census 2011). They mostly lived in hill top and earn their livelihood through jhum. They work hard in the Jhum field, garden, grow different types of vegetables, fruits and rear different types of livestock. They enjoy

dance and music. With the coming of the Christian missionaries, the Thadou-Kukis converted to Christianity. And, the pioneer missionaries taught them that all kinds of alcoholic drinks were detrimental to their faith and belief. All kinds of alcoholic beverages fermented with yeast such as, Zukha, Zuting used in ceremonies and festivals were slowly replaced by tea, but Anthom was still produced as it is considered as non-alcoholic beverages and continued to be offered as a welcome drink to guest in some villages in far flung areas. Vaizu is mainly displayed in Kut and Hun festivals.

**Study site:** Manipur is one of the Border States in the northeastern part of the country having an international boundary of about 352 kms long stretch of land with Myanmar in the southeast. It is bounded by Nagaland in the north, Assam in the west and Mizoram in the south. It has a total area of 22327 sq. kms. It lies between 23.8<sup>0</sup> N to 25.7<sup>0</sup> N latitude and 93.5<sup>0</sup> E to 94.8<sup>0</sup> E longitude.

Geographically, the State of Manipur could be divided into two regions, viz. the hill and the valley. The valley lies in the central part of the State and the hills surround the valley. The average elevation of the valley is about 790 m above the sea level and that of the hills is between 1500 m and 1800m. The hill districts occupy about 90 percent (20089 sq km) of the total area of the State and the valley occupies only about tenth (2238 sq km) of the total area of the State. Imphal is the capital city of Manipur. Manipur is a place where different waves of races and cultures met through the ages, which ultimately mingled together. The hills in Manipur are mainly inhabited by the Nagas and Kukis and the valley by the Meteis. With the creation of seven more districts on 9 December 2016, the total number of districts in Manipur comes to 16. The names of the 16 districts of Manipur are Bishnupur, Churachandpur, Jiribam, Imphal East, Kamjong, Senapati, Imphal West, Tengnoupal, Ukhrul, Thoubal, Noney, Pherzawl, Chandel, Kakching, Tamenglong and Kangpokpi. Out of the 16 districts, 4 districts are selected for the study site namely Churachandpur, Chandel, Tengnoupal and Kangpokpi districts where the Thadou-kukis are inhabiting.

#### **Preparation technique of the rice beverages:**

**1. Preparation of Chol:** Chol is locally prepared yeast, was first developed beforehand by pounding rice with the husk and mixing with *Albizia myriophylla* root or bark, it was first made into paste and then formed into cakes of different sizes and dried. Some of the respondents also mentioned the usage of refined flour or maida as a starter in making different types of fermented rice beverages Chol is used as a leavening agent to activate the fermentation process.



**Fig 1. Locally made yeast (Chol).**

**2. Preparation of Anthom :** Anthom is mainly prepared by women folk. Sticky rice is cooked in a pot (not too soft and mushy). When it is cooked, it is taken out from the pot and spread thinly over a “Go dal” (a traditional flat basket made by weaving strips of bamboo normally used for cleaning and winnowing rice). When it is cold, some “chol” is scattered over the rice and mixed evenly. The evenly mixed sticky rice is transferred into another pot and charcoal is placed over the rice. Banana leaves or polythene sheet is wrapped over the mouth of the pot and a rope or twine is used to firmly tie the mouth of the pot to make it airtight. The pot is then placed under the sun or in a warm spot in the kitchen. After 3-7 days, it is fermented. At this time, the pot is opened which gives a typical fermented and alcoholic aroma. The texture of the rice has changed to a soft and semi-solid form. At the top of the rice layer is another layer which forms a semi-liquid watery layer known as the ‘aning’. This portion is collected by separating it from the solid anthom in a bottle or container. Anthom is thus ready for consumption or to be sold in the market.

Step by step procedure for anthom preparation is given in a flow sheet.

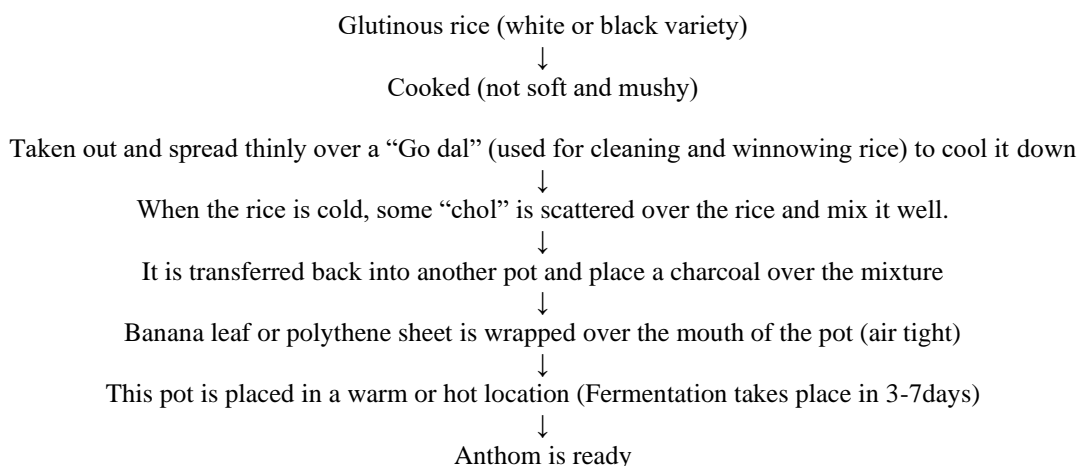


Fig 2



Fig 3



Fig 4

**Fig 2. Anthom pot placed in a hot sunny location for quick fermentation**

**Fig 3. Anthom after fermentation**

**Fig 4. Anthom served to guest or ready for consumption**

**Uses:** Anthom is believed to be an effective traditional remedy for many ailments.

**Postpartum treatment:** About five teaspoons of Anthom mix with warm water (100ml) at bed time is taken to subside pains like delivery discomfort, abdominal cramp and also removes unwanted blood after delivery.

**Menstrual cramps and pains** Consumption of Anthom relieves menstrual cramps.

**Increased milk production:** For a lactating mother, about three to four tea spoons of Anthom is mixed with one spoon of sugar and stirred well and a little warm water (about 30ml) is added into it. The consumption of this mixture tremendously increased the milk production for a mother who is unable to produce sufficient or adequate breast milk.

**3 Preparation of VaiJu:** VaiJu is prepared the same way as Anthom. The rice can be any type (glutinous or non-glutinous). The rice is cooked with little amount of water and not soft. When the rice is cooked, the rice is taken out from the cooking pot and spread thinly over a "Go dal" (a traditional flat basket made by weaving strips of bamboo normally used for cleaning and winnowing rice). When the rice is cold, some "chol" is scattered over the rice and mixed evenly to this rice husk is added and mixed properly. The amount of husk depends on the quantity of rice (quantity of husk is one third of the rice). Then the evenly mixed rice husk is transferred back into an earthen pot. *Colocasia* leaves or polythene sheet is wrapped over the mouth of the pot and a rope is used to firmly tie the mouth of the pot and ensuring that it is completely airtight. This pot is then placed in a warm or hot location under the sun and in a warm spot in the kitchen during the night. It usually takes about a week from the day that it is made ready for consumption. In case of VaiJu only the liquid portion is consumed or sipped through a straw or pipe and the solid portion or residue is called Taiche, which is used to feed animals like pig or chickens.

Step by step procedure for VaiJu preparation

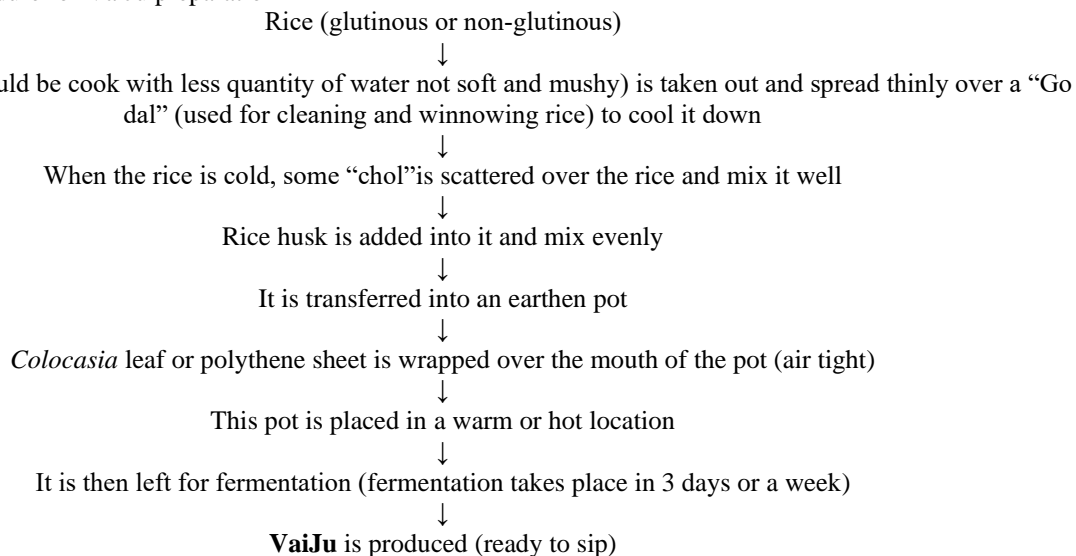


Fig 5



Fig 6



Fig 7

Fig 5. Vaiju pot placed in a hot sunny location for quick fermentation

Fig 6. Vaiju after fermentation

Fig 7. Sipping of VaiJu

**Uses :**

**Used for treatment of renal calculi:** About one glass of VaiJu (50ml) is taken three to four times daily to remove the calculi.

**Urinary tract infection:** A glass of VaiJu is taken thrice daily for treatment of inconsistent urine flow. Sipping VaiJu was a popular remedy for urinary tract infection. It is believed that in the past, their forefathers did not report problems related to kidney stones due to the consumption of Vai Ju and Anthom.

**Discussions**

The local beverages studied form an intrinsic part in the social and cultural fabric of the Thadou-Kukis. Ju was an important element in all the socio-cultural and religious ceremonies and festivals of the tribe in the pre-colonial era. They used Ju for marriage, birth, death, ceremonial sacrifices, festivals, and celebration of successful harvest and hunting. Women used to cultivate a small patch of glutinous rice to be prepared into fermented rice beverages. Almost every household had their own reserve of fermented rice beverages kept ready for guests and personal consumption. Although there was no specific research, the medicinal benefits of fermented rice beverages were known to the tribe and they used it for the treatment of different ailments. The tribe converted to Christianity from the early 20th century. They were imbibed with the instruction that all forms of Ju were intoxicants and hindered the Christian faith and belief. And they began to replace Ju with tea. Now, tea has replaced all the ceremonial use of Ju and as such, the preparation has become almost abandoned, with just a few older generations carrying on this age-old traditional preparation in some villages and supplement their financial income. Consumption of Anthom and VaiJu still continue without social prohibition as it has a lower alcohol content and it is not considered as an intoxicant.



### Conclusion

From the studies it was found that fermented rice beverages got so many curative properties. Standardization and promotion of large-scale production and to marketize the product is necessary. This will also boost the economy of the manufacturer. Modern scientific and technological approach should be applied to explore this traditional beverage to produce beneficial outcome. Further research and scientific validation are required on the curative properties of these fermented rice beverages.

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