

AN INDIGENOUS FERMENTED RICE BEVERAGE ('ANTHOM') AND ITS ETHNOMEDICINAL AND CULTURAL USES BY THE THADOU-KUKI TRIBES IN MANIPUR, INDIA.

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Abstract:

An indigenous fermented rice beverage locally known as "Anthom" is prepared from *Oryza sativa var. glutinosa*, either from black or white variety by the Thadou- Kuki tribes of Manipur. The Thadou- Kuki tribe is known for their rich traditional knowledges. They prepared and consumed different types of homemade fermented foods and beverages since time immemorial. Through trial-and-error methods, the knowledge of these fermentation technology is handed down from generation to generation, by words of mouth, and still remains alive as an oral tradition. So far, no written record is available on the technique of this fermented rice preparation technology. Due to modernization and advances in technology, the age-old traditional knowledge has been seriously neglected and the younger generation shows little interest and concern for this is depleting. This knowledge of fermentation technology is now at risk of dying out. The present paper documents the technique of "Anthom" preparation. The ethnomedicinal uses in the treatment of urinary tract infections, menstrual problems, post-partum weaknesses and pains, inadequate breast milk of lactating mothers, and kidney stones. It is also consumed after extreme fatigue and exhaustion not only by those who laboured under arduous conditions in the jhum fields of the hills and forests but also by women after child birth and those afflicted by serious sickness and weakness. "Anthom" is offered as a welcome drink to every guest by every household in the olden days. It forms an intrinsic part of the traditional diet and their cultural life style. The detail findings will be discussed in this paper. Index terms: 'Anthom', traditional preparation technique, documentation, ethnomedicinal uses, cultural importance, Thadou-Kuki tribe, Manipur

1. INTRODUCTION

Fermentation process is related to the acts of mystics, arts and science (Vandamme, 1982). It is one of the oldest forms of food technology in the Indian Subcontinent (Deka, 2012). It provides bio-nutrient minerals and fortified with bio active compounds enhancing the flavor and aroma and exert health promoting beneficial (Darby, 1979, Cambell-Platt, 1994, Steinkraus, 1998.). Indigenous fermented foods preparation and consumption are strongly linked to culture and traditions. 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. literature review shows few fermented foods such as Hawaijar (Jayeram et al, 2008), Ngari and Hentak (Thapa et al, 2004), Soibum Soidon (Giri and Janmeyjay, 2000), Shithu (Hoikhokim, 2015), Ankamthu (Hoikhokim, 2017) and fermented foods of the Naga tribes, such as Axone , Anishi fish, crab and fat (Ashiho Amao and Odyuo 2007), fermented rice beverages Atingba (Jeyaram et al, 2008) are some of the local products of Manipur. Some fermented rice beverage 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, 20014) 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.

Inspite of the vast scope for its ethnobotanical studies, so far, no research work has been carried out on Thadou Kuki tribe of Manipur, and no documentation work has been taken up on the fermented rice beverages ('Anthom') preparation by the Thadou-Kuki tribes. Thus, the present study, is taken up with a view to document and conserve the traditional knowledge for the younger generation.

II. Methodology

Survey

The study was carried out in four districts of Manipur; Churachandpur, Tengnoupal, Chandel and Kangpokpi where the Thadou-Kukis inhabited in large number. The survey was carried out during August 2017 to May 2018. Five villages from each district were selected for the study. Selected villages includes 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 districts 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 questionnaire. The respondents include 80 male and 120 female of age group between 25 -60 years. Photos were taken and the step-by-step procedure of the preparation technique, the raw materials used for the fermentation was noted down. The ethnomedicinal uses and the social cultural importance of "Anthom" from the respondents were also recorded. The respondents were mainly selected based on the individual experiences on the knowledge of this fermented rice, as informed by the villagers.

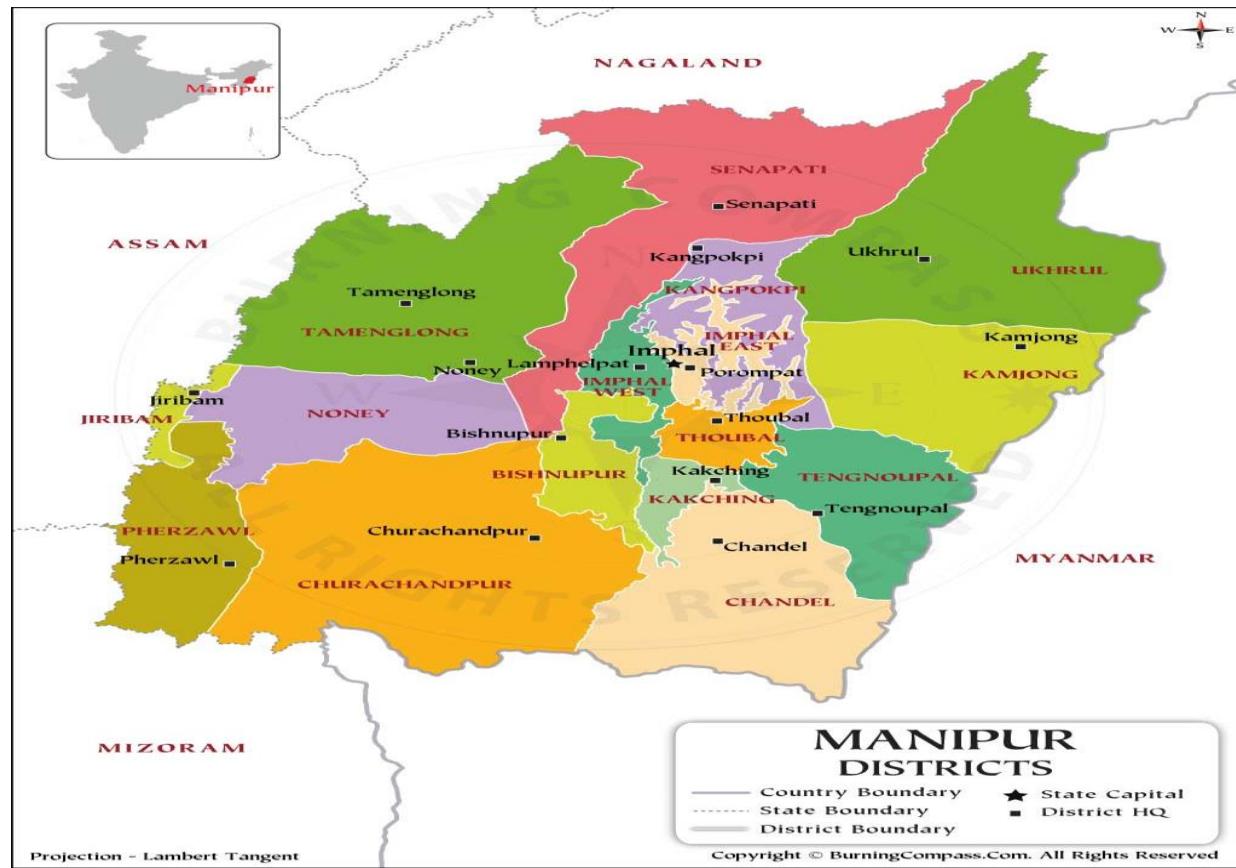
About the thadou- Kuki tribe

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 Jhum field, garden, grow different types of vegetables, fruits and rear different types of livestock. They enjoy dance and music. Traditionally they were not Christian but animist and worship different deities and spirits. With the coming of the Christian missionaries, the Thadou-Kukis were converted to Christianity. And, the pioneer missionaries taught them all kinds of intoxicants were detrimental to their faith and belief. All kinds of alcoholic beverages fermented with yeast, 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.

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° N to 25.7° N latitude and 93.5° E to 94.8° 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 is mainly inhabited by the Nagas and Kukis and the valley by the Meteis.

On 9 December 2016, the government created 7 new districts, bringing the total number of districts to 16. (seven new district 2016) 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.



III. Result and Discussion

The result of the survey from the respondents are summed up as under.

1. Ingredients (i) In the past 'Anthom' was prepared by mixing glutinous rice and Jobs Tears (*Coix lacryma-jobi*) also known as Adlay millet (locally called Mim). At present Jobs Tears is no more easily found. So, it is prepared from glutinous rice. Some used local non glutinous rice too to prepared 'Anthom'.
(ii) Yeast locally called 'Chol' is prepared beforehand by pounding rice with the husk and mixing with *Albizia myriophylla* root or bark, first made into paste and then formed into cakes of different sizes and dried. Some of the respondents also speak of the usage of refined flour or maida as a starter in making 'Anthom'. 'Chol' is used as a leavening agent to activate the fermentation process.

2. Preparation method of 'Anthom' : 'Anthom' is found mainly prepared by women folk .

Sticky rice is cooked in a pot (the rice should not become too soft and mushy) in the same way that we normally cook rice. When the sticky 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. This is then transferred back into another pot and a 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 and ensuring that it is completely airtight. This pot is then placed in a warm or hot location under the Sun during the daytime and in

a warm spot in the kitchen during the night. It usually takes about a week from the day that it is made for ‘Anthom’ to be properly fermented and ready to consume. Under optimum conditions, the ‘Anthom’ may be ready for consumption as early as 3 days but sometimes when conditions are not ideal, ‘Anthom’ may even take more than a week. When the ‘Anthom’ is ready, the pot is opened and the ‘Anthom’ gives out a typical fermented and alcoholic aroma. The texture of the rice has changed to a softened and semi-solid form. At the top is a layer of semi-liquid watery form of the ‘Anthom’ which is known as the ‘Aning’. This liquid portion is collected by separating it from the more solid ‘Anthom’, in a bottle or container. ‘Anthom’ is ready for consumption or to be sold in the market.

General step by step procedure for ‘Anthom’ preparation is given in a flow sheet.

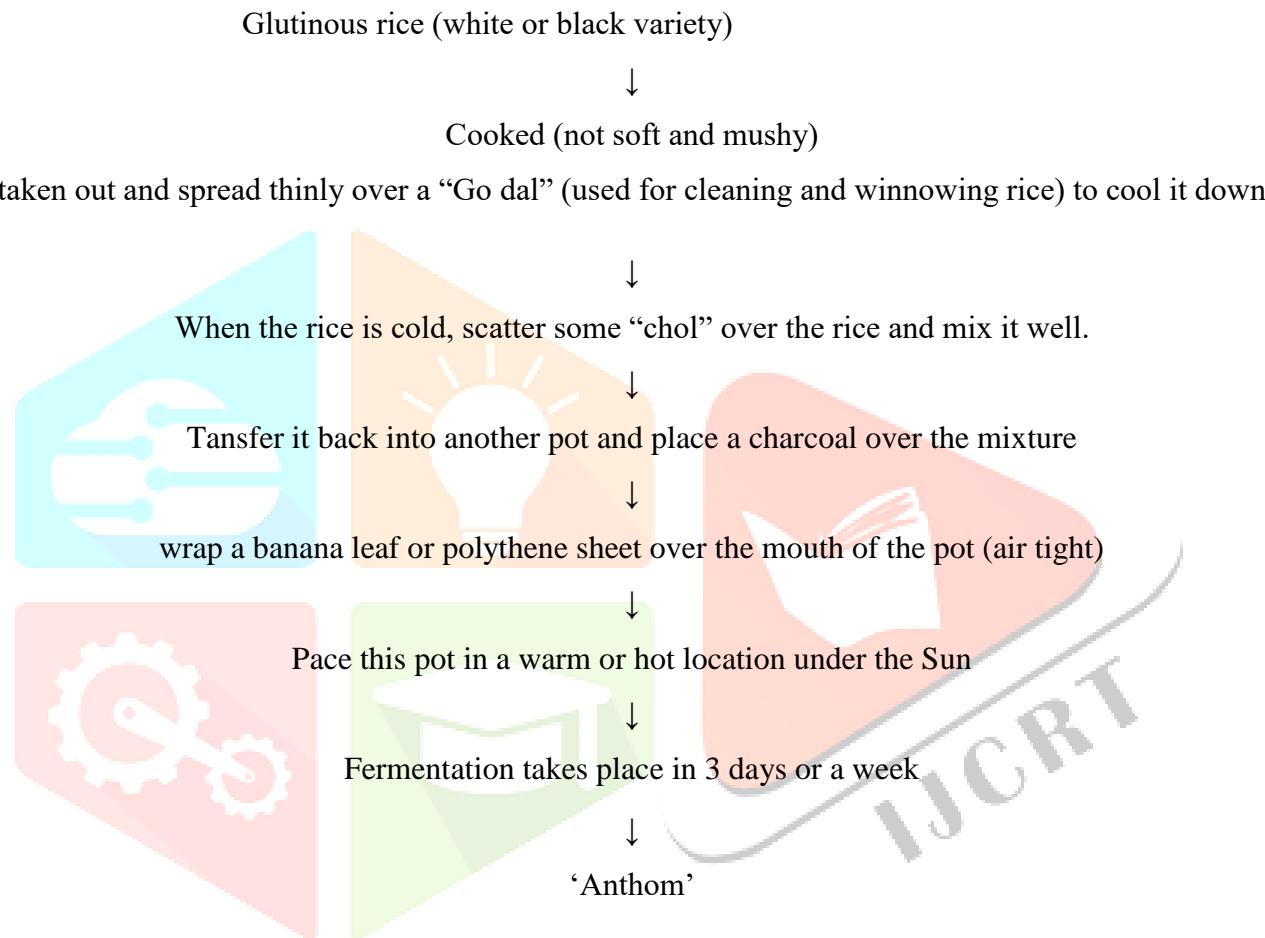




Photo 1



Photo 2



Photo 3



Photo 4

Photo 1: 'Anthom' pot placed in a hot sunny location for quick fermentation.

Photo 2. 'Anthom' after fermentation is over

Photo 3 & 4 'Anthom' served to guest or ready to consume.

Suitable Season for ‘Anthom’ preparation:

The most delicious ‘Anthom’ is made from changman (glutinous rice). It is possible to prepare ‘Anthom’ from ‘anchang theng’ which is a reference to the native and normal non-sticky rice. The best season to prepare ‘Anthom’ is during the hotter months of the year which is usually from April onwards till October. ‘Anthom’ takes a longer time to be ready to consume when it gets cold. ‘Anthom’ also has a tendency to go bad and turn sour if not properly air tight.

In the past, sticky rice and “Mim” (*Coix lacryma-jobi* also known as Jobs Tears or Adlay millet). were used to prepared ‘Anthom’. Though sticky rice is still available even today, “Mim” is no more easily found. So, the only ingredient used in making ‘Anthom’ is sticky rice.

Ethnomedicinal uses: ‘Anthom’ is believed to be an effective traditional remedy for many ailments. The ethnomedicinal uses of ‘Anthom’ from the respondents are given below:

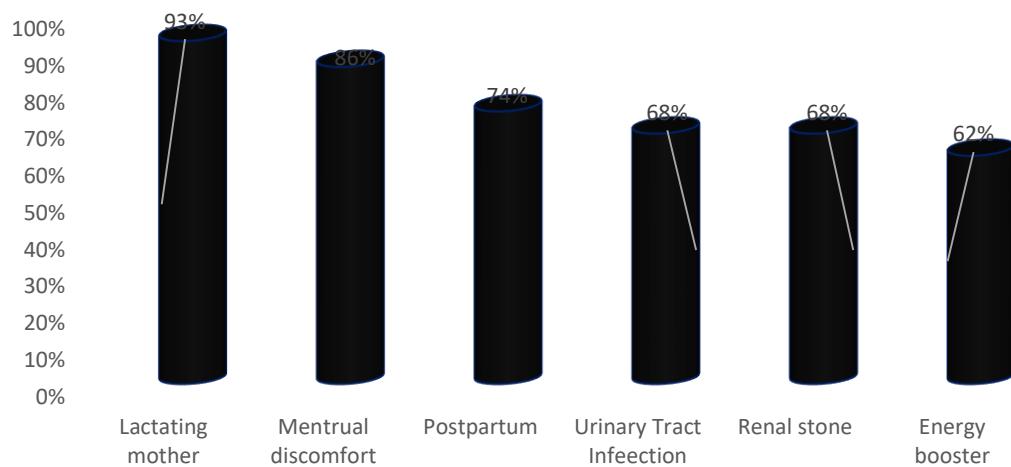


Figure: Different uses of Anthom

Used for treatment of renal calculi: About four tea spoons full ‘Anthom’ mix with warm water (70ml) is taken three to four times daily to removes the calculi.

Urinary tract infection: A glass of ‘Anthom’ is taken thrice daily for treatment of inconsistent urine flow. Our forefathers worked under the harsh sun the whole day, urinary problems were common, making it difficult and painful for the afflicted to pass urine. Eating ‘Anthom’ was a popular remedy for this particular health problem. It has been said that in the past, our forefathers never suffered from stone problems due to the consumption of rice beer and ‘Anthom’. For a person who repeatedly suffered from urinary problems. the rhizome of *Curcuma caesia* is macerated with ‘Anthom’. Two to three glass of this mixture is taken daily.

Postpartum treatment: About five teaspoons full ‘Anthom’ mix with warm water (100ml) at bed time is taken to subside pains especially of the pelvic bones and abdominal cramp and also removes bad blood after delivery.

Menstrual cramps and pains Consumption of ‘Anthom’ during menstruation period alleviate menstrual cramps and pains and enable easy flow of the menses.

Use for increased milk production: For a lactating mother, about three to four tea spoons of ‘Anthom’ is mix 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.

Used as energy booster: When our ancestors would go to work in the jhum fields, they would pack ‘Anthom’ as their tiffin. When they got exhausted from the strenuous job of clearing the thick forests, they would take a break from their arduous labor to rest and eat ‘Anthom’. ‘Anthom’ is not only filling but also nourishing, renewing one’s energy and strength. From the survey it was also found that ‘Anthom’ is taken regularly by a diabetic patient as the patient suffers from loss or lack of energy and strength and the consumption of ‘Anthom’ is very filling and wholesome, giving the patient more energy and strength than any other food or edibles.

Social and Cultural Importance:

Beverages made from glutinous rice such as ‘Anthom’, Ju forms 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. The tribe 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 ‘Anthom’. Since ‘Anthom’ has a lower alcohol content it was not considered as an intoxicant and was offered to welcome any guest that entered the house. Almost every household had their own reserve of ‘Anthom’ kept ready for guests and personal consumption. Although there was no specific research, the medicinal benefits of ‘Anthom’ was known to the tribe and they used it for the treatment of different ailments.

The tribe began to convert to Christianity from the early 20th century. They were imbued 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 far-flung villages.

IV. Conclusion

From the studies it was found that ‘Anthom’ has many curative properties. Standardization and promotion of large-scale production of ‘Anthom’ 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 ‘Anthom’.

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