

## DOCUMENTATION OF TRADITIONAL FERMENTATION OF TUNGRYMBAI (FERMENTED SOYABEAN)

### A. Introduction

Tungrymbai is a fermented indigenous soybeans food common to the tribes of Meghalaya. It is not only the famous delicacy of the tribes of Meghalaya, but also a rich source of proteins.

Pasyih is one of the villages under Laskein Block in West Jaintia Hills District which is famous for its huge production and best quality of Tungrymbai. The village is located about 26 Kms from Jowai along the Jowai-Khliehriat Road. There are around 450 households in the village with a total population of 2300. The people of this village have been practicing fermentation of Tungrymbai for centuries. Out of the total household, around 50 households are taking fermentation of Tungrymbai as a source of livelihood. On having a dialogue with few of the villagers (Kong Des Siangshai, Ma Phlim Rymbai, Ma Win Dkhar), it was understood that fermentation and marketing are done by the same people.

B. **Raw materials:-** Soybean which is a local variety are bought from Iewduh in Shillong at a rate of Rs. 55/Kg. These soybeans are grown extensively at Umroi, Bhoirymbong area in Ri-Bhoi. The villagers said that they have tried cultivating soybean in the village, but could not thrive well in that particular area.

Fire wood are purchased at a rate of 7000/Truck. 2 trucks/ year are consumed through-out the whole process of fermentation by one family.

### C. Method of fermentation:-

- 20 Kgs of Soybean are boiled in a pot for 8-10 hours till it become soft. Water should be added every now and then to ensure that it does not get dry.
- When the beans are soft, it is filtered using a muslin cloth. The filtered beans are kept in a basket having a base and lined with leaves grown locally and commonly known as '*Sla lamet*'. The filtrate is collected in a container and can be used to feed pigs and cows.
- The baskets are covered with a jute bag for the bean to rise and are kept over a fire place without disturbing for 3 days and 3 nights.
- After 3 days, the basket is open and checked whether the pungent smell has developed or not. If the smell has developed, it indicates that the soybean is ready for smashing.
- Smashing is done with the help of a wooden pestle and mortar.
- If the fermented soybean is too dry, cold water is added at this stage.
- The smashed soybeans are kept in a big container and are ready for used.
- Out of 1 Kg soybean seeds, 2 Kg of fermented soybean is produced.
- These fermented soybeans can be stored for 2-3 days during summer and 7-10 days during winter.

### D. Production:-

- The production is more in winter (November-March) than in summer because in summer there is a high risk of spoilage and the taste is also much better during winter.
- Per household, 2.5 quintal Tungrymbai is produced in a month during winter and 1 quintal during summer.
- Total production from the village is approximately 105 tonnes/year

### E. Market value:-

- The fermented soybean is mainly sold in Jowai market and other nearby market such as Shangpung, khliehriat at the rate of Rs.80/Kg.

#### F. Cost of Production per household

Particulars	Mandays	Amount/year
<b>i. Cost of raw materials/inputs:</b>		
a. Soybean seeds @ 1tonne/year		55,000
b. Firewood @ 2 truck/yr (Rs7000/truck)		14,000
<b>ii. Operational cost:</b>		
c. Total mandays for production @ Rs180/day	104	18,720
d. Total cost of Marketing @ Rs160/day	104	16,640
e. Total mandays for transportation of products @ Rs 1100/month		13,200
<b>iii. Final product cost:</b>		
a. Total cost of final products/year		1,60,000
<b>iv. Total cost of production:</b>		
a. Total cost of production/year		1,17,560
b. Unit cost of production per kg of tungrymbai		58.76
c. Total Net profit		42,440

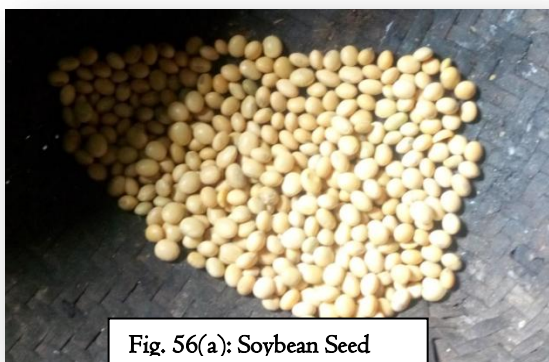


Fig. 56(a): Soybean Seed



Fig. 56(b): Soybean kept for rising in a basket



Fig. 56(c): Utensils used in boiling of Soybean



Fig. 56(d): Mortar for grinding Soybean



Fig. 56(e): Furnace place for cooking soybean



Fig. 56(f): A product of soybean locally known as 'Tungrymbai'



Fig. 56(g): Packaging of 'tungrymbai' with sla lamet



Fig. 56(h): A product 'Tungrymbai' added with black sesame