

INDIGENOUS METHOD OF 'SUGAR CAKE' (*PATALI*) PRODUCTION FROM *BORASSUS FLABELLIFER* L. IN WEST BENGAL, INDIA

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Abstract

Sugar cake or *Patali* is basically prepared from the watery sweet sap of *Borassus flabellifer* L. Most of the poor villagers of South 24 Parganas of West Bengal make this sugar cake using their inherent traditional method and marketed for their survival. The sugar cakes or *Patali* is eaten as raw and also used in the preparation of various famous delicious Bengali sweets. The present work records the stepwise entire indigenous method of *Patali* or *Sugar cake* preparation from *Jaggery* (Gur). Necessary stepwise records along with the photographs are presented in this article.

Key words : Borassus flabellifer, Patali or sugar cake, indigenous knowledge, economic value.

Introduction

The indigenous people of the tropical world from the pre-industrial period have an intimate relationship with the natural resources of their environment. Among the most economically important food plants of the world are mostly belongs to three families *i.e.*, grass family (Poaceae), the legume family (Fabaceae) and the palm family (Arecaceae). The utility of these three plant families are known to human kind since the ancient time (Basu and Chakraverty, 1994; Basu and Mondal, 2015). India is a country of many cultures and rich in diversified traditional knowledge to make traditional foods from different plant products. Borassus flabellifer L. is most important economic palm in India and the watery sap is used in the making of Jaggery (Gur) or fermented into toddy. Many village levelartisans are thriving on this Jaggery making industry. This sugar cake or Patali is sometimes used to make the various delicious traditional foods and commonly used in various Bengali sweets. 'Moaa' and 'Murki' are the very famous traditional food materials of Bengal and these are made with puffed paddy mixed with hot liquid Patali. Globally some work has been done on the utility of Palm and recognize as one of the most important economic crop in the tropics (Anyawu *et al.*, 1982). In India, a good number of workers published their articles on utility and conservation of Palm (Basu, 1991).

Materials and Methods

The survey was made during the period of 2014– 2016 and the data was collected from the experienced Patali maker from the study area. Some Patali makers who are making Patali generation after generation were selected from various villages and interviewed in details and entire method was documented and photographed stepwise very carefully (Chowdhury, 2012). Several villages like Hinchakhali, Nikarighata, Moukhali, Jahukhali, Korakati, Jayrampur, Basiram, Millonmore, Ietkhola, Bodhukulla, Kamarpara etc. of the district of 24 Parganas of West Bengal, India. Patali is also prepared in few villages of Burdwan, East & West Medinipur and Bankura District. The making of Patali includes mainly two distinct phases *i.e.*, i) collection of plant sap as key ingredient from the male and female inflorescences of Borassus flabellifer L. during the month of February to early June of each year and ii) preparation of Patali from that sap through the traditional methods.

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Results and Discussion

During winter indigenous people of some districts of costal and dry areas of West Bengal are found busy to collection of sweet sap from the inflorescences of mature trees of *Borassus flabellifer* L. They are also taking lease of such a good number of trees for this sweet sap from the land owners who are having such land with many *Borassus flabellifer* trees. The freshly collected sweet sap may be sell as sweet drink or used for the preparation of sugar cake preparation was documented and a step wide method for the patali preparation is described below.

Process of sap collection

Indigenous people or 'Seuli' collect sweet sap from the cutting site of male and female inflorescence, therefore the tapping season commences with the flowering season from end of the February to early June. In order to obtain the maximum quantity of sap, tapers must possess a high degree of technical skill for the collection of sweet sap; as well as the physical strength is needed to climb up on the tall Borassus trees. 3 to 4 pitcher is hanged into the scratched inflorescence. In male inflorescence, spadix is bind with a rope and obliquely cut by a sharp knife but in female inflorescence, young immature fruits are selected and cut it obliquely by a sharp knife and sweet sap is collected at the intervals of 8 to 10 hrs. After 8 to 10 hrs cutting site again should be scratched out and new pitcher is hanged and entire process continues for 3 days. Whole process again repeats after 3 days gapping. In starting, male inflorescence produces large amount of sweet sap compare to female inflorescence.

Making of Patali from sap

Sometimes sweet sap is sold in door to door in various villages of 24 Parganas. On the other hand *patali* is used from sweet sap. The sweet sap yield per tree is varying with the duration of sap collection and it has been found that the less quantity gives high quality or density sap and vice-versa. Correct approximate numerical data for first 3 days of sap collection in respect of Sugar cake yield is as following:

1st day : Sap quality is high but quantity is low, and total sugar cake yield is around 1 - 1.5 kg

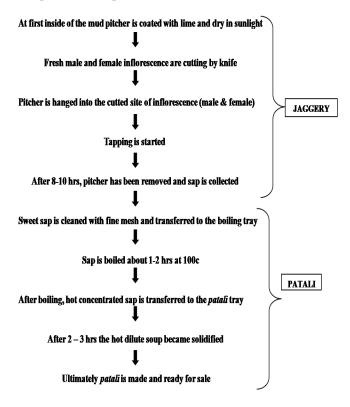
 2^{nd} day : Sap quality and quantity is medium, and total sugar cake yield is around 2 - 2.5 kg

3rdday : Sap quality is low and quantity is high and total sugar cake yield is 3 kg or above

Generally, 5 litter sweet sap yields around 1.2 kg *patali*. After 3 days, one mature tree produces around16–

25 litter sweet sap that gives around 4.3 - 6.7 kg sugar cake or *patali* and their market value retailer is Rs. 80 - 100 per kg whereas retailers sell it around Rs. 150 - 180 per kg. Local people sometimes buy this fresh sweet sap at morning at the rate of Rs 5 - 10 per 250 ml for their direct consumption because it good for bowl clearance.

Preparation of *patali*



Economic value and uses of *patali*

The peoples of 24 Parganas are basically dependent on agriculture and agricultural based product. They are lives in very remote places and earns from the saline vegetation. Most of them are directly and indirectly dependent on Sundarban biosphere reserve. The socio economic status of the poor and ethnic people of 24 Parganas are directly depends on the sweet sap collection and Patali production. Various types of sweet dishes are prepared by patali. Among these the Naru, Moaa, Murki etc. of Jaynagar is famous in West Bengal. This patali is used in various religious activity of Hindu and Muslim community. From this point of view, patali is very popular for their economic as well as utility value. The *patali* is more useful in the preparation of famous delicious *Moaa*, known as Moaa of Jaynagar. Presently this product is highly demandable among the states as well as country. Now a days, this product is exporting for other countries. *Patali* is also useful in the preparation of various types of sweets like as Sandesh, Rasgolla etc. and their



Plate 1 : A. Pitcher (Vaar) coated with lime, B. Female inflorescence is covered with pitcher, C. An ethnic people carrying the sweet sap, D. Mixing all the sweet sap, E. The pitcher with full of sweet sap, F. Preparing for boiling, G. Concentrated sweet sap, H. Spreading sweet sap, I & J. Two types of patali, K, L & M. Sailing patali in local markets.

demand and market value is higher than the other types of sweets.

Conclusion

Sugar cake or *Patali* is a very popular and have a great socio-economic impact in some parts of West Bengal. Most of the tribal community of the study area directly or indirectly depends on this. But this indigenous knowledge is being destroyed day by day due to lack of sap collector and sugar cake makers. Urbanization and the demand of growing greedy populations are the major threat to this traditional knowledge. So to save our tradition, we must have to aware about the conservation of this indigenous system of *Patali* processing and encourage the persons who are involved in this indigenous sugar cake making industry, otherwise such valuable knowledge will disappear in near future.

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