

A Traditional Variety of Rice in Tamil Nadu - Illupai Poo Samba and Its Food Product (Muffins)

Kilburt M.¹ and R. Emilin Renitta²

¹Ph.D in Food Processing and Engineering, Division of Food Processing Technology, Karunya Institute of Technology and Sciences, Coimbatore 641114.

²Associate Professor, Division of Food Processing Technology, Karunya Institute of Technology And Sciences, coimbatore 641114.

Corresponding Author: emilinrenitta@karunya.edu.in

Abstract

This study explores the characteristics, cultivation, nutritional benefits, and culinary applications of Illupai Poo Samba rice, a traditional variety from Tamil Nadu, India. Derived from the monocot species *Oryza sativa* and *Oryza glaberrima*, rice is a staple food for billions, especially in Asia. Illupai Poo Samba is noted for its fragrant, unpolished grains with a unique aroma reminiscent of Mahua blossoms. Cultivated during the samba season, this variety matures in approximately 144 days, yielding about 700 kg of grain and 1,200 kg of straw per hectare. Nutritionally, Illupai Poo Samba rice is rich in essential nutrients, low in calories, and supports digestive health, making it beneficial for weight management and cardiovascular health. The rice also has therapeutic properties, aiding in conditions like Pakshavatha. To highlight its versatility, a formulation for muffins incorporating Illupai Poo Samba flour is presented. The recipe includes gluten-free maida, butter, eggs, and baking powder, demonstrating the potential of this rice variety in modern culinary applications. Overall, Illupai Poo Samba rice represents both a cultural heritage and a valuable component of a balanced diet.

Introduction

The seeds of the monocot crops *Oryza sativa* (Asian rice) and *Oryza glaberrima* (African rice) are identified as rice. For most people on the planet, especially in Asia, it is the most often consumed staple meal in the form of cereal grains. The widely accepted range of rice quality has been validated by attempts to describe rice quality in various nations and areas using local experts' advice in conjunction with analysis of the physicochemical characteristics of the rice kernel (Calingacion *et al.*, 2014). Rice has a subtle scent similar to that of Mahua blossoms, which are Illupai Poo. Illupai poo Samba is a greenish-brown bran that is organic, unpolished, uncooked, fragrant, and slightly sticky. It is paired with gorgeous black paddy that gives the fields a unique colour. When soaked, the rice sheds its aroma, and when cooked, it becomes mushy and

sticky. This rice variety from Tamil Nadu is among our most well-liked varieties. The details of this variety is mentioned in the Tamil texts "*Abithana Chinthamani*" and "*Pallu Illakiyam*". Though only cultivated by a select few dedicated farmers, it has been brought back from near extinction by dedicated organic seed saver growers. Because of this, it's now one of our sporadic rice options, accessible for a portion of the year.

Cultivation

Illupai poo samba rice is cultivated in the samba season. Illupai poo samba rice is in white colour, fine rice, which weight about 1000 grains is 19.0 gms. It is a 144 days crop of average height 110 cms and maximum height 118 cm. The yield for this rice about 700 kgs of grain and 1200 kgs of straw.

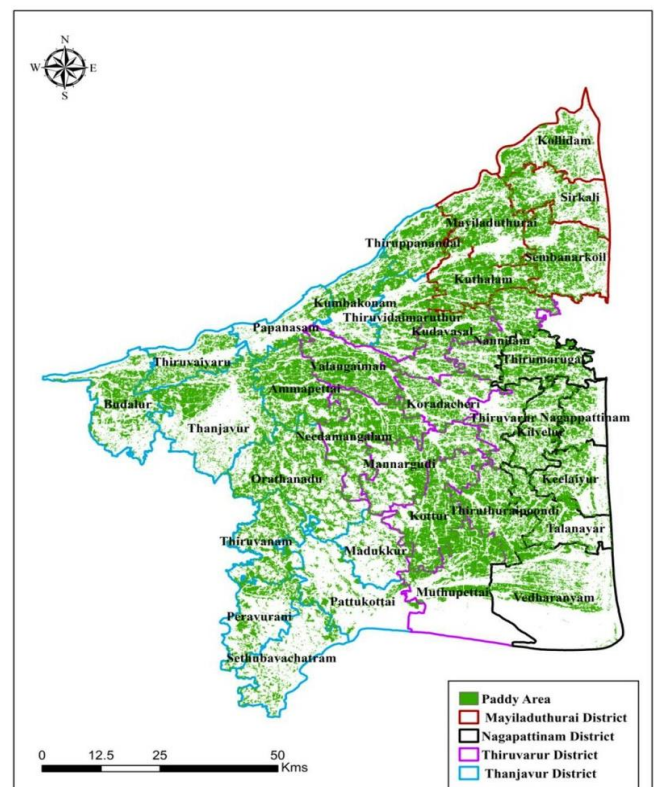


Fig.1 Rice varieties cultivated during samba season (Prakash *et al.*, 2023)

Table 1 Nutritional composition for illupai poo samba rice (100g)

Parmeters	Values
Moisture	11.14
Total ash	0.54
Protein	9.47
Carbohydrate	77
Fat	1.85
Energy	362.53Kcal
Potassium	86.6mg
Iron	3.40mg
Calcium	22.10mg

Health benefits

Illupai poo samba rice acts as a dietary supplement that stimulates brain function. It generally helps the body's digestion and cellular processes. The body's main organs function more effectively due to the nutrients, minerals, and other aromatic compounds it contains. Illupai Poo Samba has low blood cholesterol, low salt content, and low calorie content, it is an essential component of a diet that is well-balanced. It also aids in blood pressure regulation and weight loss. Additionally, this rice aids in the prevention of heart-related issues such immunological deficiencies, knee discomfort, malfunction, and soreness.the rice Kanji can help with Pakshavatha, a type of paralysis that affects one side or a portion of the limbs.

Formulation of muffin incorporated with illupai poo samba flour

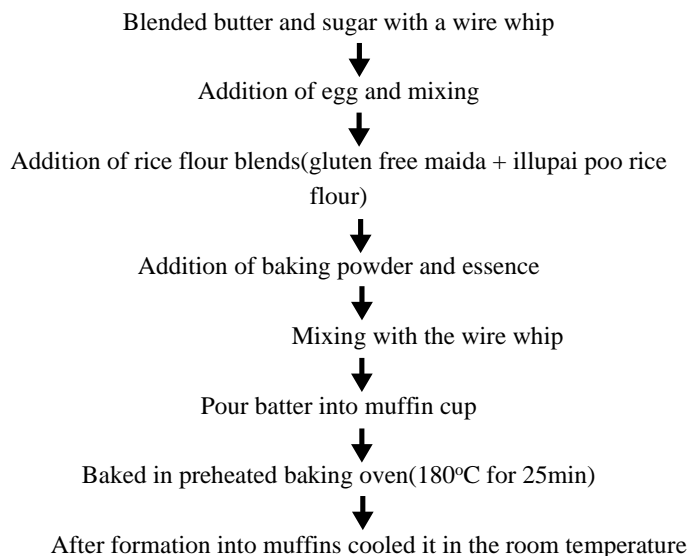
For the formulation of muffins, the ingredients like gluten free maida, illupai poo samba rice, baking powder and vanilla essence were mixed. Add butter, egg and powdered sugar and beat it well. Then add the beaten butter, egg and sugar to the powder mix and add water to make it into a soft dough. Pour batter in a muffin tray and bake them at 180°C in a preheated oven for 15min. They cooled in room temperature.

Conclusion

Illupai Poo Samba rice, a traditional variety from Tamil Nadu, stands out for its unique characteristics and health benefits. Known for its greenish-brown bran and fragrant aroma similar to Mahua blossoms, this rice is valued for its organic, unpolished nature and slightly sticky texture when cooked. Despite being near extinction, dedicated organic seed savers have revived

this rice, making it a rare but cherished option available for part of the year.

Process flow chart



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