

## **Padi Bajong - A fragrant coloured rice from Lubok Nibong**

by

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Padi Bajong is a fragrant rice variety planted by the traditional rice farmers of Lubok Nibong in the Betong Division of Sarawak. Commercially, it made its first debut at the Pesta Beras Wangi in May, 2007.

Varietal selection and evaluation were carried out by the Rice Section at Agriculture Research Centre (ARC), Semongok in 2007 to 2008. One of the main roles of the Rice Research Section in ARC is to identify, select, evaluate and certify seeds of High Quality Traditional Rice (HQTR) varieties and develop a 'seed to shelf' concept leading to branding of local rice.

Seed Production of Padi Bajong was fast - tracked by selecting three committed farmers to produce good seeds of Padi Bajong variety in Lubok Nibong in September, 2007. The farmers were trained to produce high quality seeds with three rounds of rouging (weeding out of off-types) and the incorporation of Good Agricultural Practice (GAP).

Currently, locally grown rice sold in the market is a mixture of many varieties. The percentage of broken rice is high ranging from 40-60% and subsequently it is not able to command a premium price in the market. Using good and pure seeds will increase yield by 15-20%. This would improve the quality of local rice produced and subsequently add value and increase the income of small holder farmers.

Farmers in the Lubok Nibong, Betong Division plant Padi Bajong for their own consumption and if there is a surplus they sell them at the Tamu in Pusa, Saratok. Bajong is a tall traditional variety that is photo period sensitive, this means that only a single crop can be planted in a year.

### **Registration for Geographical Indication (GI)**

Beras Bajong was filed as 'Sarawak Beras Bajong' for Intellectual Property Rights (IPR) under the category for Geographical Indication (GI) because of its special characteristics, taste, aroma and reputation. The writer, on behalf of the Department of Agriculture, Sarawak, filed for GI with the Intellectual Property Corporation of Malaysia (MyIPO) on 22<sup>nd</sup> January 2009. The GI Certification is expected to be awarded to Sarawak Beras Bajong in April 2010.

### **Characteristics of Padi Bajong**

Bajong grows well in both upland and rain fed areas. In areas when water and crop management is good Bajong can produce a yield of 2.5-3.5 tons. The average yield is 3 tons/ha.

The plant is tall with stems measuring about 140-145 cm. The stems are strong and do not lodge easily unless there is a strong wind before harvest. This variety is suitable for transplanting. It should be transplanted at a spacing of 30cm by 30 cm for optimum yield. It matures in 130 days after transplanting. Bajong is moderately tolerant to Blast.

Bajong has a coloured pericarp ( outer seed coat) which leaves an intense purple colour on the endosperm (starchy part). It is sold as a semi-polished rice and it cooks to a soft and tender

texture. Milled grains measure 5.75 mm long and 1.66 mm wide with a length/width ratio of 3.47. It is classified as a medium slender grain rice under the International Rice Classification System. It has a total milling quality of 68 % and a head rice recovery rate of 75 %.

### **Agronomic Practices**

The variety Bajong is suitable for transplanting. Transplanting involves growing rice seedling in seed beds before they are planted in the field. A seed rate of 25 Kg. /Ha is recommended. Transplanting is done when the seedlings are about 30 days old. Three to four seedlings are recommended for each planting point. The seedlings should be planted 1.5 to 3.0 cm deep. If planted too deep, tillering is inhibited. The recommended planting distance is 30 cm x 30 cm to ensure good vegetative growth so that the plants produce maximum number of productive tillers.

### **Fertiliser Application**

Fertiliser application is important to ensure good plant establishment and uniform ripening. Two weeks after transplanting 50 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O are applied per hectare.

### **Water Management**

In areas where irrigation water is available the fields should be kept flooded to control weeds, pests and diseases. Weed and pest control are important in rain-fed areas.

### **Harvesting**

It is recommended that the paddy is harvested when 85% of the grains are straw coloured. This is to reduce losses due to shattering and attack from birds, insects and rats.

### **Agronomic and Physico-Chemical Characteristics of Bajong**

<b>Variables</b>	<b>Bajong</b>
Maturation (days) After Transplanting	130
Yield t/ha	2.5-3.5
Plant height (cm)	140-145
Productive tillers	12 – 15
1000 grain weight (g)	21.73
Weight of panicle (g)	6.7
Length of panicle (cm)	32-34
Grain length (mm)	5.75
Width (mm)	1.66
Length width ratio	3.47
Amylose content (%)	15.6 (Soft)
Gelatinisation Temp	4.33 (Intermediate)
Gel consistency (mm)	80 (Soft)
Aroma	Strong



*Harvesting by combined harvester*



*Unpolished grains of padi Bajong*