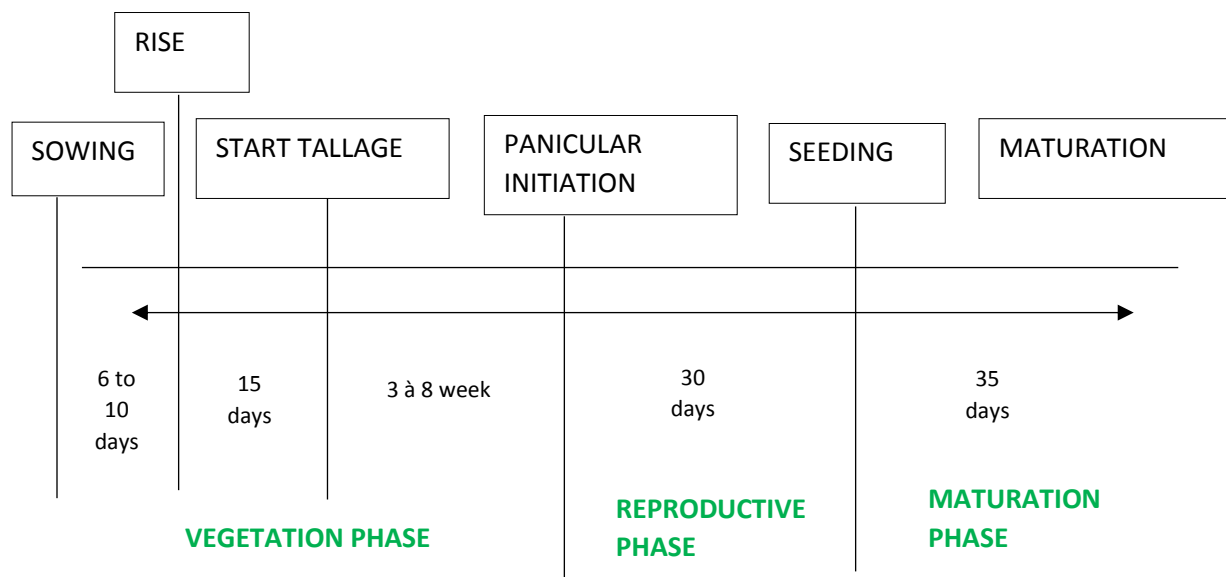


# TECHNICAL SHEET

## Introduction to rice

Rice is a cereal of the Poaceae family and is grown in tropical, subtropical and warm temperate regions. It is rich in starch and is cultivated on land that is flooded. Rice (*Oryza sp*) plays a major role in the diet of rural and urban households in Africa and is a strategic and priority product for food security in developing countries (Seck et al, 2013 cited by Kouassi, 2019). According to the FAO1 (2016) cited by Kouassi (2019), rice is the most common cereal in the world after wheat, accounting for 20% of cereal consumption. It is consumed by more than half of the world's population with nearly 50 million consumers in Africa (Kouassi, 2019). There are several varieties of rice (Brown rice or brown rice, parboiled rice, white rice, long grain rice, short grain rice, etc.) in the world (Adégbola et al, 2014). Rice is of Asian origin but is now distributed on all five continents (Adégbola et al, 2014).

## Rice cycle



**Figure 1 :** Rice cycle (source : Kouassi, 2019)

## Status of red rice in Ghana

With the increase in the percentage of literacy and awareness of diets, more and more people tend to be more health conscious and are interested in nutrient fortified foods. Pigmented rice varieties (red rice) are more nutritious than their white pericarp counterparts. Red rice varieties have a rich and distinctive flavour. They are also rich in nutrients.

The red bran of rice contains high levels of antioxidants and flavonoids, which are found in red colored cereals and fruits, as well as naturally produced vitamin E. To date, no red rice variety has been commercialized in Ghana. Gbewaa red has been introduced to serve the niche market for red rice.

In addition, the rice industry in Ghana is booming. According to Owusu Afriyie Akoto (pictured), Minister of Food and Agriculture of Ghana, the grain harvest is expected to rise to 1.1 million tonnes in 2021, 15.7% higher than last season (Agence Ecofin, 2021).

### **Targets of the technology**

Lowland and irrigated rainfed ecologies

### **Area of application of the technology**

Lowland and irrigated rainfed ecologies. It targets only the niche market of health-conscious red rice.

### **Level of technology development or deployment**

Fully developed technology being commercialized

### **Photo of the technology**



**Figure 2 :** CSIR-Banse Gbewaa red, a climate-smart hybrid rice variety

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