## Assessment of Black Rice through Natural Farming for Nutritional Security - KVK Sindhudurg

R rishi Vigyan Kendra (KVK) is located at Kirlos in Sindhudurg district of Maharashtra. Rice is a staple food and majority of farmers cultivating white rice in Sindhudurg. KVK has initiated and promoted black rice in Sindhudurg through natural farming techniques. KVK has introduced the Black Rice variety Chak hao and Kala Namak towards the farmers' field through the natural farming techniques. Chak-hao black rice originated from Manipur which demands is increasing day by day due to its superior benefits.

Initially black rice cultivation is assessed on KVK instructional farm. Chak-hao and Kala Namak black rice seed made available from Manipur. After that Front Line Demonstrations (FLDs) on black rice are conducted directly on farmers' field. FLD is the unique approach to provide a direct interface with farmers for prove and popularize the new technology. The team of KVK scientists B. V. Kajarekar, B K Gawade, Dr V Y Sawant, V B Dhamapurkar, Dr K V Desai, V P Sawantbhonsale, S G Tawade,



Brig. Sudhir Sawant

The pioneers of the natural farming movement



M M Palay, N B Sawant directly involved in planning, execution and monitoring of the FLDs under the direction of Brig Sudhir Sawant, Ex MP and Chairman of KVK since last five years. Best season for black rice farming is kharif. Duration of black rice is 145 to 150 days. The average yield is 30 to 35q/ha. Seed rate required 40-50kg/ha with planting distance 25cmx15cm. Black rice area in Sindhudurg is increasing now a days. The farmers demand for black rice seed is increasing day by day. KVK has encouraging the farmers to grow black rice through natural farming in their adopted villages under the project of prosperous and Happy Village. More than 100 farmers have started the cultivation of black rice in kharif season covered up to 50ha area around the district. As compare to conventional white rice black rice tuned out very profitable crop which fetches the primitive high price of Rs 200 to Rs 250 per kg. The CBR for Paddy and polished rice is 1.78 and 1.87 respectively. It has great potential for export in neighboring countries. This technology helps farmers for increasing livelihood, empowerment and socioeconomic status.



Black rice is the primitive rice variety cultivated in the olden era. The grains of this black rice are similar in size to the normal rice. However the color is light to dark black in color. There are a limited number of black rice varieties available in India. Black rice is the only wild rice variety having many health benefits. Black rice farming is one of the promising and emerging area of cultivation due to their high antioxidant content restrict the growth of cancerous cells in the body. Due to medicinal property black rice fetches higher price in market, giving better returns to its black rice farmers. Moreover, inclusion of such rice in our diet will help to reduce the incidence of cancer.



## Medicinal properties of black rice

Anthocyanin content in black rice is about 3%. Anthocyanin present in black rice maintain the healthy heart hop our body. Black rice benefits are many like anti-oxidant and anti cancer properties. Black rice doesn't contain arsenic. It acts as a natural detoxifier by cleansing all impurities and dangerous microbes in our body. Black rice is rich source of fiber than other rice cultivars. It also helps in preventing diabetes. Black rice is the excellent variant of rice in order to control obesity. The protein content of black rice is high which is good for human health.

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