

## **Development of a Fiber Rich Rice Based Biscuit**

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Dietary fibre has demonstrated its benefits in health and disease prevention in medical nutrition therapy. The study was carried out to make utilize the Banana Blossom (BB) as a fibre source in developing a nutritionally enriched biscuits. The Blossom of Banana is an excellent source of crude fibre in the human diet. Dietary fibre promotes laxation, lowers blood glucose and cholesterol levels. The specific aim of this study is to develop a value added product with BB and rice flours in different blends. Banana Blossom was cut in to slices and dipped directly in to 20 g/l Citric acid solution for five minutes and dehydrated at 55 °C for 8 hours and pulverized. Resultant Banana Blossom Flour (BBF) was packed in Polyethylene and Polypropylene and was subjected to proximate analysis, to determine moisture absorption capacity and **L'** value and it was observed that the polyethylene is superior to polypropylene as a packing material to store the BBF. Banana Blossom Flour was used to supplement rice flour in percentages of 3,5,10 and 15 for biscuit production. Biscuits made of 15% coarse BBF and red rice flour with added ginger flavor were selected as the best treatment based on selected sensory attributes such as taste, color, texture and overall acceptability tested in the sensory evaluation. The best treatment was subjected to a proximate analysis and it was revealed that the crude fibre content of the selected biscuits was 12.32%. To analyze the shelf life of the selected formula, total colony count, yeast and mould count, moisture absorption capacity, acidity of the extracted fat were determined. According to the shelf life analysis, the developed product has a shelf life of three weeks without any added preservative. Aluminum foil laminated with high density polyethylene (HDPE) was evaluated as superior to polyethylene as a packing material for the developed biscuits. The fibre content of the developed product is far above the comparative products available in the market.

Key words: Banana Blossom, Banana Blossom Flour, Dietary fibre, Biscuit, Rice, Shelf life, Polyethylene