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# **SHORT COMMUNICATION**



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# **Development and Sensory Attributes of Banana Inflorescence Pickle**

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#### **ABSTRACT**

Banana fruit production is widely taken in India. The production of banana crops takes place mainly in the states of Maharashtra, Tamil Nadu, Andhra Pradesh, and Karnataka. Even though it is available, the health benefits of banana inflorescence do not reach the people, so created product aimed at helping the people get the health benefits of banana inflorescence through banana inflorescence pickles. In this pickle, the main ingredients are banana inflorescence, oil, and masala. In this pickle preparation, we used the cleaned florets between the bracts and petals from the banana inflorescence. The prepared pickle of banana inflorescence has a long shelf life and is a beneficial and healthy product to consume. Fibre and minerals such as potassium, calcium, and iron are abundant in banana inflorescence. So it's beneficial for the digestive system as well as increasing iron levels in the body.

**Keywords** – Banana inflorescence, Pickle, Florets, healthy pickle, Pickle.

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#### **INTRODUCTION**

India produces a large amount of bananas. Banana inflorescence is a part of the banana plant that is consumed very infrequently in daily meals. The banana inflorescence contains various health benefits. Banana inflorescence is also known as "functional food" [1].

The banana is one of the oldest plants in the world. It has many nutritional properties as well as antimicrobial agents present in banana plants and their different parts. India is the world's largest producer of bananas [2].Banana inflorescence has many nutritional benefits, so it can be used in various types of food products like nut chocolate [4]. But this type of chocolate is not consumed daily by the common people. They need a different type of product, like banana inflorescence pickles, for consumption in a meal.

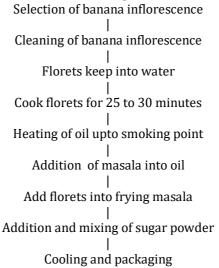
The quality of fried foods depends upon the chemical changes in frying oil. Soybean oil is a good source of vitamins A and E [5]. As well as the flavour of food, its quality depends upon the quality of the oil used during processing. Good-quality soybean oil is used in pickle processing. Protein, fiber, moisture, and mineral content are all found in high concentrations in banana inflorescence [10].

Protein, carbohydrates, fats and oils, vitamins, and minerals are essential for the proper nursing of the body. Vegetables and flowers are high in bioactive compounds such as dietary fiber, as well as a variety of other functional components with health-promoting properties [11]. Pickle filling in a glass jar or glass bottle for 3 months without any changes in quality or character of pickle [12]. Banana inflorescence pickles fulfil the maximum nutritional requirements of the human body.

### **MATERIAL AND METHODS**

This process involves food product development and sensory evaluation of Banana Inflorescence Pickle. Banana inflorescence, refined soybean oil, sugar powder, special masala prepared for banana inflorescence pickle, salt etc. required material use for development of banana inflorescence pickle.

## Flow chart for preparation of banana inflorescence pickle -



# Processing of banana inflorescence pickle-

1. Selection of raw materials -

Select the fresh banana inflorescence, fine sugar powder, refined soybean oil, and masala specially made for banana inflorescence pickles. It's the only ingredient necessary for the development of banana inflorescence pickles.

2. Cleaning of banana inflorescence -

The most important part of the cleaning of raw materials is the cleaning of banana inflorescence. The only edible components of the banana inflorescence are the florets. Remove the bracts and large petals first, then take the floret. After selecting the florets, remove the calyx and pistil from the florets and retrieve the cleaned florets. It is kept in water and used during pickle processing.

3. Pickle processing –

Florets are removed from the water and cooked for 20 to 30 minutes in fresh water. First, prepare a refined soybean oil in a 1:2 ratio with the amount of oil and florets. After heating the oil, add the masala and fry well. After the proper frying of masala, add the cooked florets to the masala and mix properly. Then stir in the powdered sugar and half of the florets.

4. Packaging and storage -

After cooling a pickle its fill into a cleaned glass jar or glass bottle for the long shelf life of product.

# **RESULTS AND DISCUSSION**

# Sensory evaluation

Banana flower pickles were developed using various amounts of flowers, refined soybean oil, and spices. Banana flower pickles were analysed for sensory analysis. Hedonic rating: A 9-point hedonic rating scale was used to measure the acceptability of food products. Specific faculty members and experts were asked to rate banana flower pickles.

**Table 1 - Sensory Evaluation of Final Product** 

|          | Appearance | Odour | Flavor | Taste | Texture |
|----------|------------|-------|--------|-------|---------|
| Member 1 | 8          | 7     | 7      | 8     | 8       |
| Member 2 | 7          | 7     | 8      | 7     | 8       |
| Member 3 | 7          | 8     | 6      | 8     | 7       |
| Member 4 | 8          | 7     | 8      | 8     | 8       |

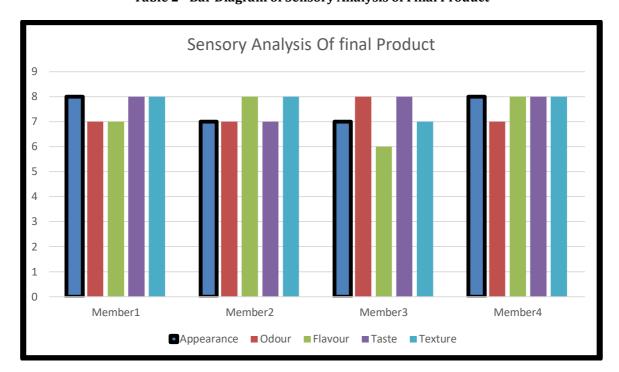


Table 2 - Bar Diagram of Sensory Analysis of Final Product

Table 3 - Nutritional Analysis of Banana inflorescence

| Parameter    | Content per 100 g |  |  |
|--------------|-------------------|--|--|
| Energy       | 52 kcal           |  |  |
| Carbohydrate | 9.9 g             |  |  |
| Protein      | 1.6 g             |  |  |
| Fat          | 0.6 g             |  |  |
| Fiber        | 5.7 g             |  |  |
| Calcium      | 56 mg             |  |  |
| Iron         | 56.5 mg           |  |  |
| Potassium    | 553.6 mg          |  |  |
| Vitamin E    | 1.7 mg            |  |  |

## CONCLUSION

The banana inflorescence pickle is prepared with acceptable quality. The final product is rich in carbohydrates, protein, potassium, and iron. It is beneficial for digestion. It keeps the iron level in the blood stable. It also confirms a remarkable amount of Vitamin E.

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