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A Study on Nutrient Evaluation of Sesbenia Grandiflora Flower Powder Incorporated in Soup Varieties

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Abstract

The agathi is a fast -growing tree The plant (botanical name Sesbania grandiflora) the flower white, pink and red. Sesbenia grandiflora, commonly called as vegetable hummingbird, katurai, agathi. The flowers hang in bell-like clusters behind the thicket of leaves. the flowers rank high in nutritional and medicinal value. The flowers growing most in February-March. . the flower rich in calcium, phosphorus, fat, iron, vitamins A, B, and C. Sesbania grandiflora plant is important medicinal plant .the flower cure in heart palpitation, inflammation, kidney related diseases including cancer. The Sesbenia grand flora highly nutrient rich in vitamins and minerals. The leaves of Sesbania grandiflora flower have been used in local traditional medicine.

Keywords: High in Nutritional and Medical Value, Vitamin and Minarels, Anti Inflammation, Anti Oxidant

Introduction

Sesbenia grandiflora is a fast -growing tree and the leaves are regular and rounded and the flower white, pink and red. The fruits look like flat, long thin green beans. The tree thrives under full

Exposure to sunshine and is extremely frost sensitives. It grows where there is goodsoil and a hot, humid climate. Sesbenia grandiflora watery suspension essentially diminished the raised hepatic, renal and lipid peroxidation markers and enhanced the decreased antioxidant levels while reestablishedthe hepatic coma.

The leaves, fruits and flowers can all be consumed as the vegetables and added to curries or salads. Known as Bookhood in West Bengal, the flower is commonly consumed by dipping in batter and frying. The flowers and leaves are containing vitamins and minerals and associated with anti-inflammatory, analgesic and antipyretic effects.

The Sesbenia grandiflora flower highly nutrient rich in vitamins and minerals Sesbenia grandiflora of for a health benefits beside form its nutritional value. A good combination of agathi spinach flower with pepper, cumin, garlic and onion in cookedform will take care of heart palpitation, inflammation, kidney related diseases including cancer . grandiflora. It also widely used in traditional medicine as curve all medicines. Theclimate of South India is very suitable for this plant. It is rich in calcium, phosphorus, fat, iron, vitamins A, B, and C.

The leaves turn bright yellow before shedding. Flower clusters hanging at leaf base have 2-5 large or giant flowers. The color of the flowers may be pink, red or white. The pea like flowers are 510 cm in length, curved, about 3 cm wide before anthesis. The large-flowered hermaphroditic species appears to be pollinated by birds. Pods are long and narrow, hanging down 30-50 cm by 8 mm, septate, wide, flat, with swollen margins and about 15-40 palecoloured seeds. The seed is bean like, elliptical, red brown, 6-8 in a pod, 3.5 mm, each weighing 1 g. (Pradip Karmakar 2016)

Materials and Methods

The study entitled “a study on nutrient evaluation and consumer acceptability of incorporated *Sesbania grandiflora* flower powder in soup varieties.

Selection of Sample

- Development of *sesbania grandiflora* flower powder.
- Development of incorporated carrot soup, tomato and cauliflower soup of *sesbania grandiflora* flower powder. Assessing the consumer acceptability of
- These *Sesbania grandiflora* flower powder incorporated soup varieties.
- Estimation of nutrient content of the standard and most acceptability
- *Sesbania grandiflora* flower powder incorporated In soup varieties.

Selection of Sample

Onion, tomato, potato's garlic, ginger, mint leaves, curry leaves, pepper, cauliflower, carrot. Salt well purchased from local market of Mannargudi and *Sesbania grandiflora* flower was harvested from home garden

Development of Sesbania Grandiflora Flower Powder: Selection

Sesbania grandiflora flower was carefully selected free from any damage from insects and rodents.

Cleaning

Cleaning refers to separation of the contaminant from procedure and completely removed of the contaminant. So that cleaned procedure is free from recontamination. The contaminant for *Sesbania grandiflora* flower may be soil small other parts of cleaning (srilakshmi. B)

Drying

Sesbania grandiflora flower were harvested in all season. It may be left today in the field for up to 5 days further drying required is completed used by plastic sheets laid down on the sun for drying.

Grinding

The *Sesbania grandiflora* flower were ground into fine flour. If remove the other parts it may damage. The mixing machine of mechanized grinding is used.

Sieving

After grinding the flour should be sieved. Sieving helps flour can be used, in the preparation in all food products. (srilakshmi. B)

Development of Sesbania Grandiflora Flower Powder Incorporating Recipes

The total three recipe like vegetable soup, green leafy vegetable soup and mushroom soup were selected and the damask *Sesbania grandiflora* flower powder incorporation of *Sesbania grandiflora* flower powder in standardized soup items.

The uses of *Sesbenia grandiflora* flower powder in standardized ensure high quality in food preparation. It also eliminates guesswork and prevents variation

Quality

The uses of exact amounts of the various ingredients produces accurate yield prevents left over and promotes food cost control. (mayabadri 2008)

Assessing the Consumer Acceptability of Thestandard and *Sesbania Grandiflora* Flower Powder Incorporated in Soup Varieties

A total number of 25 consumers were randomly selected to assess the appearance, colour, taste, texture, and flavour of the *Sesbenia grandiflora* flower powder incorporated in soup varieties

A score card was provided, a copy of the score card in appended in appendix first and scores allotted were

Excellent	- 5
Very Good	- 4
Good	- 3
Fair	- 2
Poor	- 1

Nutrient evaluation and sensory evaluation or sensory analysis is the process of evaluations consumer products using the five senses consumer are organized to taste a particular product before it hits store shelves using sensory analysis. Result of these tests can determine whether or not a product will never consumer. (Micaela Mahoney, 2009)

Estimation of Nurient Content of The Standard The Most Acceptable *Sesbaniagranfilora* Flower Powder Incorpated In Recipe

The nutrient content of the standard and most acceptable ,onion, stalks incorporated was analysed by standard procedure.the procedure are appended II .the nurrtrents analysed are given below.

Energy	:	Anthrone method
Protein	:	Lowry's method
Carbohydrate	:	zak 's method
Calcium	:	ethylene diamine tetra method (EDTA)
Vitamin C-	:	iodometric method

The Result and Discussion

The above table indicator that the overall acceptability of 2-8 % *Sesbenia grandiflora* flower powder soup varieties.

The overall acceptability of 2-8 % *Sesbenia grandiflora* flower powder incorporated carrot soup 12.8±0.25, 15.2± 0.67,15.8±0.24, 18.5±0.46

The overall acceptability of 2-8 % *Sesbenia grandiflora* flower powder incorporated cauliflower Soup 13.6±0.29, 15.3±0.33, 15.8±0.43, 16.6±0.32

The overall acceptability of 2-8 % *Sesbenia grandiflora* flower powder incorporated tomato soup 13.1±0.77, 15±0.41,16.8±0.43, 18.2±0.53

The above table reveals the overall acceptability of the all developed recipes the mean score of *Sesbenia grandiflora* flower powder, carrot tomato soup, cauliflower soup, was the most acceptable *Sesbenia grandiflora* flower powder incorporated recipe was carrot soup

Summary and Conclusion

The study entitled “a study on nutrients evaluation and consumer acceptability of agathi (Sesbenia grandiflora) flower incorporated in developed food products”

Was undertaken with specific objectives for the effective use of incorporating agathi flower powder

In normal carrot, tomatoes, and cauliflower soup to assess the consumer acceptability and thenutrient quality.

Sesbenia grandiflora flower (agathi), carrot, tomatoes, cauliflower, were purchased from local market in Thiruvavur. Agathi flower powder incorporated with carrot soup, tomatoes soup, and cauliflower soup At the level of 2 to 8 percentage.

The developed recipes were evaluated for organoleptic evaluation using 4-point hedonic scale by 20 Individuals. Nutrient content for the most acceptable agathi flower powder incorporated carrot soup Was analysed.

Agathi flower is a rich source of carbohydrate, protein, and also good source of Vitamin-C, calcium, potassium, thus ensure good health and increase the overall life span of human Beings.

Agathi powder is a rich in antioxidant, antifungal, and anti-microbial agent that help your internal functions stay in full flow.

It is used to treat strengthen the bones and teeth and nature body coolant. It prevents cancer, heart and kidney disease.

Make an Agathi powder ghee fry using cumin seeds, pepper, ajwain seeds, garlic, onion and Agathi powder. Consume this regularly along with noon meals which helps people to get rid of smoking habits and also flushes out the smoked toxins from the body.

It cures urinary tract infections, and improves eye health

The Salient Finding and Observation from Study are furnished below

The soup was developed out of Sesbenia grandiflora (agathi powder) flower powder found to be acceptable in term of appearance, colour, flavour, and taste.

The Agathi powder incorporated carrot soup had colour, appearance, flavour, texture, and taste at 2% ,4% ,6%,8% level of incorporated had scored higher consumer acceptability.

From the consumer, 4% agathi powder incorporated carrot soup was most accepted than compared to other soups.

The 4% agathi powder incorporated tomato soup was found to be acceptable by the consumer than compared to other level of incorporation.

The 4% Agathi powder incorporated cauliflower soup was found to be acceptable

The consumer than compared to other level of incorporation. From the consumer acceptability score it is found that 2 to 8 percent Agathi powder

incorporated carrot soup was most acceptability than compared to their incorporated recipes.

The energy content of the most accepted Agathi powder incorporated carrot soup at 4 percent level was

The protein content of the most accepted Agathi powder incorporated carrot soup at 4 percent level was

The carbohydrate content of the most accepted Agathi powder incorporated carrot soup at 4 percent level was

The calcium content of the most accepted Agathi powder incorporated carrot soup at 4 percent level was

The vitamin – content of the most accepted Agathi powder incorporated carrot soup at 4 percent level was

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