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Development of Soup Mix Powder Using Avarampoo (Senna Auriculata)

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Abstract

Avaram (Senna auriculata (L.) Roxb. syn. Cassia auriculata L.; Family: Fabaceae) is a traditional medicinal plant used in India's Ayurveda and Siddha traditions of medicine to cure a variety of diseases. There have been reports of therapeutic uses for almost every part of the plant, such as the flowers, leaves, seeds, bark, and roots. Traditionally, it has been used to treat diabetes, asthma, rheumatism, dysentery, skin illness, and metabolic problems. The herb avaram is used to manufacture powdered soup mix. Tastes fantastic and an excellent substitute for energy drinks like soup is the antioxidant-rich mix. By functioning as a natural blood purifier, antioxidants shield the body and skin. Avaram poo soup is made with a mixture of dried and natural spices. It can also help with Blood sugar, Skin tone, Body odor, Menstrual cycle, Hair growth, Premature greving.

Keywords: Avarampoo, Traditional Medicinal Plant, Soup Mix Powder, Treatment of Diabetes, Antioxidant Rich, Menstrual Cycle, Premature Greying.

Introduction

Avaram (Senna auriculata (L.) Roxb. syn. Cassia auriculata L.; Family- Fabaceae) is a traditional medicinal plant, widely used for the treatment of various ailments in Ayurveda and Siddha system of medicine in India. Almost all the parts of the plant, such as flowers, leaves, seeds, barks, and roots have been reported for their medicinal uses. Traditionally, it has been used in the treatment of diabetes, asthma, rheumatism, dysentery, skin disease, and metabolic disorders. Roots of Senna auriculata (L.) Roxb. shows the presence of anthraquinone glycosides such as 1, 3 - dihydroxy - 2 - methylanthraquinone, 1, 8dihydroxy - 6 - methoxy - 2 methylanthraquinone - 3 - o - rutinoside, 1, 8 - dihydroxy - 2 - methylanthraquinone - 3 - o - rutinoside, flavone glycoside, and two leucoanthocyanins like leucocyanidin-3-orhamnopyroside and leucopeonidin-3-o-l-rhamanopyroside. (Guruprasad C. Nille, 2021). Avaram is an herb that is used to make herbal tea. The antioxidant -rich combination tastes great and is a great alternative to caffeinated drinks like tea and coffee. Antioxidants protect the skin and body by acting as a natural blood purifies. Avaram hydrates the

body. Avarampoo's tea moisturising characteristics aid with issues like excessive thirst. Avarampoo aids in blood sugar regulation. It naturally raises insulin levels in th body. It is especially good for diabetes when consumed on an empty stomach. Avarampoo can be used to treat a child's fever. It is an excellent and healthy cure for children because it is free of toxins and chemicals. Avarampoo juice is used to treat a variety of urinary tract issues, including painful urination. Avarampoo has a variety of therapeutic applications in gastrointestinal diseases. It has been shown to help with liver function and constipation.

Objectives

- 1. To develop the value-added products using avarampoo.
- 2. To analyze the nutrients, present in the developed products. To analyze the shelf life of the developed products.
- 3. To assess the sensory evaluation of the developed products. To estimate the cost analysis of the developed products.

Review of Literature

Review of literature brings into light the ideas and postulates of various scholar's researchers, scientists and writers concerning the particulars study. The review of the present study is entitled on the topic "Development of Soup Mix Powder Using Avarampoo (Senna Auriculata)".

History of Avarampoo

Avarampoo (Senna auriculata (L.) Roxb. Syn. Cassia auriculata Ia.; Family-Fabaceae) is a traditional medicinal plant, widely used for the treatment of various ailments in Ayurveda and Siddha system of medicine in India. Almost all the parts of the plant, such as flowers, leaves, seeds, barks, and roots have been reported for their medicinal uses. Traditionally, it has been used in the treatment of diabetes, asthma, rheumatism, dysentery, skin disease, and metabolic disorders.



Traditional and Ethnopharmacological Uses of Senna auriculata (L.) Roxb

The foremost description of the Senna auriculata (L.) Roxb. Is available in Kaiyadeva Nighantu, a classical Ayurveda text (15th century), where its Pramehahara property (antidiabetic action) through different botanical parts of the plant has been mentioned. Flowers have Pramehashamana property (antidiabetic action). Tender fruits have mentioned for their Vamihara (antiemetic), Krimihara (anthelmintic), Sarvapramehahara (antidiabetic), Trishnaghna (thirst alleviating), Akshihita (eye tonic), Ruchya (appetizing) properties. Seeds

Pharmacological Actions of Senna Auriculata (L.) Roxb Antidiabetic Activity

Aqueous extract of Senna auriculata (L.) Roxb. Flower has shown promising antihyperglycemic activity in a dose 450 mg/kg body weight which found more significant than the doses of 150 and 300 mg/kg body weight. Similarly, the significant reduction in the urine sugar was found with aqueous extract of Senna auriculata (L.) Roxb. At doses of 150 and 300 mg/kg body weight

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whereas, at 450 mg/kg dose, sugar was absent in the urine of experimental diabetic rats. The result was more promising than glibenclamide-treated rats (Latha and Pari, 2003a; Latha and Pari, 2003b). Also, Jain and Sharma, (1997) reported the anti-diabetic potential of the aqueous flower extract of Senna auriculata (L.) Roxb.

Glycogen Synthesis

The flower extract of Senna auriculata (L.) Roxb. Has also been reported for its salutary effect on hepatic enzymes involved in the carbohydrate mechanism. The flower extract (450 mg/kg body weight) was found significant when compared with the standard drug, glibenclamide (600 gg/kg body weight) in increasing the hexokinase activity and decreasing the gluconeogenic enzyme activity in STZ-induced diabetic rats. The increased plasma insulin level in flower extract-fed diabetic rats was responsible for the modulation of hepatic carbohydrate metabolic enzymes (Latha and Pari, 2003a; Latha and Pari, 2003b).

Immunomodulatory Effect

The flower extract from Senna auriculata (L.) Roxb. Showed significant immunomodulatory effect in aged rats. The administration of extract in aged rats at different doses was found to activate T cell immunity with increased T and B cell percentage accompanied by an enhanced proliferation of splenocytes in both resting and LPS-stimulated cells. The increased number of T cells was further supported by observing the elevated counts of CD4+, CD8+, and CD25+ regulatory cells. (John et al., 2011).

Herbal Drug-Drug Interactions

The concurrent use of an herbal tea prepared from the flowers of the Senna auriculata (L.) Roxb. And theophylline performed a significant drug interaction. Their concurrent administration resulted in an increased steady-state level (32.5%) of drug theophylline (Thabrew et al., 2004).

Antioxidant activity of Senna Auriculata flowers

The ethanol and methanol extracts of senna auriculata flowers were screened for antioxidant activity. The antioxidant activity was determined by an improved assay based on the decolorization of the radical monocation of 2,2'-azinobis-(3-ethylbenzothiazoline-6- sulfonic acid) (ABTS) and 1, 1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging method.

Extract Flower %	Dry flower %	Fresh flower %		
Methanol	14	16		
Ethanol	15.5	17		
Acetone		15		
Aqueous	12			

Table 1. % Yield of Various Extracts of Senna Auriculata

Conclusion

The present study exhibited the antibacterial effect of various extracts of senna auriculata. The inhibitory effect of the extract justified the medicinal use of senna auriculata and further study is required to find out the active component of medicinal value. (S. Maneemegalai and T.Naveen at 2010)

Methodology Preparation of Soup Mix Powder Using Avarampoo Ingredients Needed for the Preparation

Figure - 1



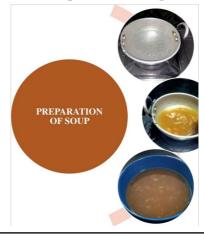
S.No	Ingredients	Quantity	
1.	Avarampoo	75gm	
2.	Pepper	30gm	
3.	Toor Dhal	30gm	
4.	Cumin seeds	30gm	
5.	Coriander Seeds	15 gm	
6.	Fennel Seeds	5 gm	
7.	Dry Chilies	5 gm	
8.	Curry leaves	1 Ogm	
9.	Oil	5ml	
10.	Carrot	25 gm	
11. Beans 12. Cabbage 13. Sweet Corn		25 gm	
		25 gm	
		25 gm	

Chart 1 Preparation of Soup Mix Powder





Chart 2 Preparation of Soup from the Prepared Soup Mix Powder



- Step 1 At medium flame add 2 glass of water in a pan.
- Step 2 Add 1 teaspoon of prepared soup mix to the boiling water.
- Step 3 Allow it to boil for few minutes.

Result And Discussion

Here we have used Laboratory testing for nutrient analysis of the product Soup mix powder.

Nutrient Analysis of the Product - Soup Mix Powder

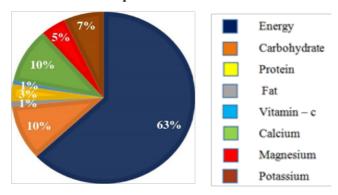


Table 1

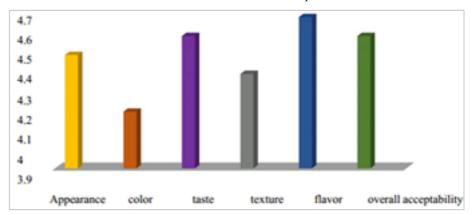
S. No	Parameters	Units	Result
1.	Energy	Kcal/100g	371
2.	Carbohydrates	g/100g	60.7
3.	Fat	g/ 1 oog	6.1
4.	Protein	g/100g	18.3
5.	Vitamin — C	mg/100g	4.4
6.	Calcium	mg/100g	60.8
7.	Magnesium	mg/100g	25.8
8.	Potassium	Ppm	41.5
9.	Phosphorous	Ppm	25.8
10.	Zinc	mg/Kg	0.21
11.	Iron	mg/100g	0.8

Score Card for the Formulated Product - Soup Mix Powder
Table 2

S.No	Particulars	Score	Percentage
1.	Appearance	4.5	90.7
2.	Colour	4.2	84.7
3.	Taste	4.6	92.5
4.	Texture	4.4	89.8
5.	Flavour	4.7	94
6.	Overall acceptability	4.6	92.5

Schematic Representation of the Formulated Product

Score of the Formulated Product - Soup Mix Powder



Shelf Life of the Formulated Product

The selected "development of Soup Mix Powder Using Avarampoo (Senna Auriculata)" was kept in normal room temperature. They were examined once in 10 days for the growth of microorganism, development off appearance, color, taste, texture and production of gases.

S. No.		Product	Shelf Life			
		Product	1st Day	10th Day	20th Day	30th Day
	1.	Soup Mix powder	No change	No change	No change	No change

Cost Analysis of the Formulated Product

		Cost of	Cost Incured by the Price		Percentage of The Total
S. No	Ingredients	Ingredients Per KG (RS)	Quantity of The Ingredient	Price	
1.	Avarampoo				
2.	Pepper	525	20g	11	23
3.	Toor Dai	185	15g	3	7
4.	Cumin Seeds	492	30g	15	32
5.	Coriander Seeds	270	20g	5	11
6.	Fennel Seeds	245		1	2
7.	Dry Chillies	400	1 Og	4	9
8.	Curry leaves	83	log	1	2
9.	Asafoetida	660	lg	1	2
10.	Carrot	34	25g	1	2
11.	Beans	80	25g	2	4
12.	Cabbage	10	25g	0.2	0.43
13.	Sweet Corn	90	25g	2	4
14.	Salt	10		0.05	0
	Total	46.2	98.43		

The cost for the preparation of 300gm soup mix powder is 46 rupees and miscellaneous cost is 10 rupees. Hence the total cost is 56 rupees.

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Hence the 50gm of Soup mix powder cost 10 rupees. The product is to be estimated to sold for 20 rupees (Profit — 10 rupees).

Labelling and Packaging of Formulated Product

Soup mix powder using the below label and packaging material



Conclusion

- The formulated products are highly recommended for Adolescents and children.
- Since no preservative/additives are added.
- The formulated products contain certain natural compounds which is prepared without any additives or artificial ingredients.
- Avarampoo helps to treat diabetes, prevents urinary tract infections, constipation.
- The study reported and suggested that the soup mix powder can be given for the diabetic patients.
- Developed product was well accepted.

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