



International Journal of Home Science

ISSN: 2395-7476

IJHS 2023; 9(2): 20-22

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www.homesciencejournal.com

Received: 22-03-2023

Accepted: 24-04-2023

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To standardization and sensory evaluation of Ajwain leaves based product

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Abstract

The objective of this study was to determine that ajwain is great for the stomach and digestive health as it is offered as an effective remedy for stomach ache, cramps and abdominal discomfort. But not many people know about ajwain leaves that are equally Ajwain leaves are said to possess numerous health benefits. While we know that these may be good for the stomach (as ajwain seeds or carom seeds are), there are many more benefits of ajwain leaves. Aid stomach ache and cramps. Your mother or grandmother must have suggested you consume whole carom seeds or ajwain with water to treat stomach ache or ease menstrual cramps. Developed product of ajwain leaves were paratha, tea, kabab, kadhi, biscuit by using score card method (9-points hedonic scale). The result of ajwain leaves product for paratha, tea, kabab, kadhi, biscuit (T₁), (T₂), (T₃) were the best in all treatment in case of sensory attribute were 7.9, 8.5, 9, 7.5, 8.3 & 8.9 respectively. Developing products were accepted by panel member.

Keywords: Ajwain leaves, Plant, Carom seeds, Stomach, *Tracyspermum ammi* L.) Seed

Introduction

Ajwain leaves help in promoting digestion in the body. They can be consumed after meals to improve digestion. They are also used to increase appetite, especially in children. The ridged leaves of the Ajwain plant are edible and an easy home remedy for an upset tummy. They act as a mouth freshener and help to do away with foul breath. Although these leaves come from different plant as the true ajwain plant, the succulent leaves are still known as *ajwain* leaves in the Indian subcontinent. The plant that the leaves are a part of is also known as the 'Indian Borage,' which is also called the *ajwain* plant sometimes. Ajwain- one of the important Indian herbs, that uplifts the taste of any Indian dish has to be this. Used in various forms and ways, Ajwain is one of the useful herbs. Every part of ajwain plant is used to make varied medicines and syrups. Having a very strong smell, Ajwain is called Ugargandha in Sanskrit, which means strongly scented. Use of Ajwain leaves are varied and is known to be the instant reliever of a stomach ache. And because of this reason, many menstruating women have Ajwain raw or added in their meals, in India. Ajwain leaves are said to possess numerous health benefits. While we know that these may be good for the stomach (as ajwain seeds or carom seeds are), there are many more benefits of ajwain leaves. Aid stomach ache and cramps. Your mother or grandmother must have suggested you consume whole carom seeds or ajwain with water to treat stomach ache or ease menstrual cramps. This is a typical Indian formula for stomach woes. It is so because the ajwain plant including seeds and leaves have properties to soothe inflammation in the stomach that causes pain and discomfort. You can chew ajwain leaves to ease your stomach. The ajwain plant is an ancient herbal remedy that has been used for centuries to help improve the health and wellbeing of individuals around the world. Its uses have been documented in traditional Indian Ayurvedic medicine, Chinese medicinal texts, and Middle Eastern folk medicines. From aiding digestion to relieving pain, this widely grown herb can be found in many forms throughout India, Pakistan, and other parts of Asia. With its wide-ranging benefits, unlocking the potential of ajwain plant is becoming increasingly popular among those seeking natural methods of healing. Ajwain leaves is a powerful source of antioxidants that can protect cells against damage caused by free radicals.

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Additionally, it contains several anti-inflammatory agents that may help reduce joint pain associated with arthritis or other inflammatory conditions. Thanuja GS, *et al.* (2010) [2] According to The present experiment entitled “Effect of organic manures, plant growth promoting rhizo bacteria and micronutrients on growth, grain yield and quality of Ajwain was carried out to study the individual and interaction effect of organic manures and micronutrients on vegetative growth, yield and quality of Ajwain seed. Farm yard manure and vermin compost were used as organic source recommended dose of nitrogen. Sayeed M. *et al.*, (2010) [1]. To studied the Treatment with medicinal plants is considered very safe as there is no or minimal side effects. *Trachyspermum ammi* is medicinal plant. The roots, seeds and leaves are used in traditional & folklore Medicine. The study was carried out to ascertain the anti-bacterial.

Materials and Methods

The experimental “To standardization and sensory evaluation of Ajwain leaves based product” work will be carried out in the research laboratory of faculty of Home Science Sultanpur. The different material use in experiment and the techniques employed.

Method

- Collection of ingredients.
- Processing of raw material.
- Development of Drumstick leaves based product.
- Sensory evaluation.
- Calculating Nutritive value
- Statistical analysis.

Collection of ingredients: The required material will be purchased from local market of Sultanpur.

Development of Ajwain leaves product: The best acceptable leaves were used for product development as follows:

Result and Discussion

The data were collected on different aspects per plan were tabulated and analysed statistically. The results from the analysis presented and discussed chapter in the following sequence.

Calculation of nutritive value of Ajwain leaves.

Organoleptic evaluation of Ajwain leaves based products.

Calculation of nutritive value of Ajwain leaves.

Calculation of nutritive value of Ajwain leaves (100gm).

Nutrients	Total
Energy	363 kcal
Protein	17.1 gm
Carbohydrate	24.6 gm
Fiber	21.2 gm
Phosphorus	443 mg
Fat	21.8 gm
Calcium	1525 gm
Iron	12.5 mg
Minerals	7.9 gm

The nutritive value of ajwain leaves was calculated with the help of “Nutritive Value of Indian foods” given by ICMR (2004) [8]. Table shows that the total energy, proteins, minerals, fat, fiber, carbohydrate, calcium, phosphorus, iron. Value of most acceptable ajwain leaves was 363 kcal, 17.1 g, 7.9 g, 21.8 g, 21.2 g, 24.6 g, 1525 g, 443 mg, 12.5 mg respectively.

4.2 Organoleptic evaluation of Ajwain leaves based products.

- Flavour and taste.
- Body and texture.
- Colour and appearance.
- Overall acceptability.

Table 1: Organoleptic evaluation of Ajwain leaves Biscuit

Product	Flavour Taste	Body & Texture	Colour & Appearance	Overall acceptability
T0(Control)	7	7	7.5	7
T1 (Experimental)	7.9	7.5	7.8	7.5
T2 (Experimental)	8.5	8.3	8.4	8.5
T3 (Experimental)	9	8.9	9	9

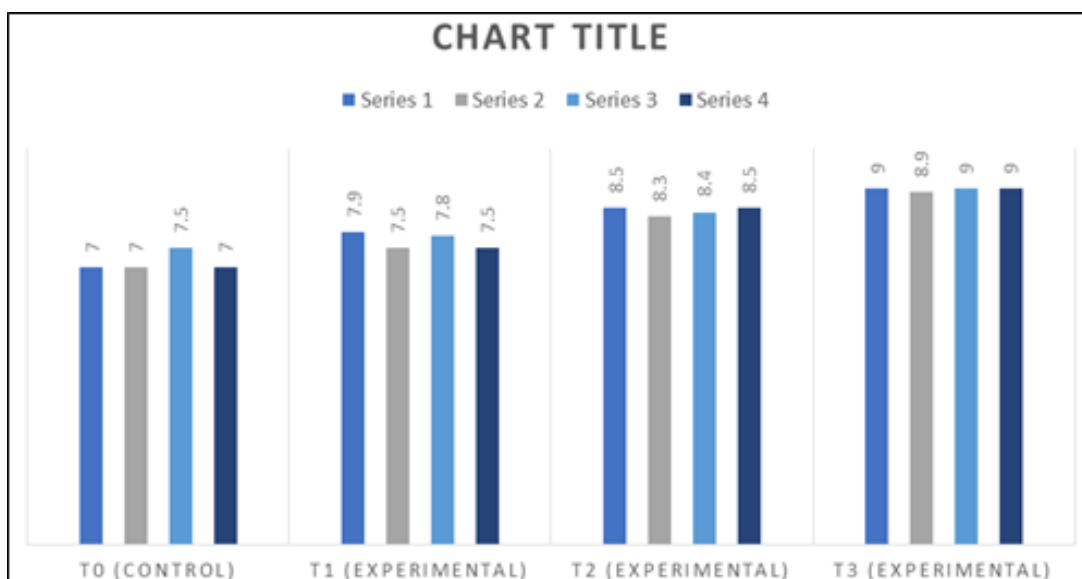


Fig 1: Organoleptic evaluation of Ajwain leaves Biscuit

Conclusion

The present investigation entitled “To standardisation and product development with ajwain leaves based product.” The experimental (T₃) obtained maximum 9, 8.9, 9, and 9 for flavour and taste, body and texture, colour and appearance & overall acceptability but the experimental (T₁) obtained maximum 7.9, 7.5, 7.8 and 7.5, for flavour and taste, body and texture, colour and appearance and overall acceptability but the experimental (T₂) obtained minimum 8.5, 8.3, 8.4 and 8.5 for flavour and taste, body and texture, colour and appearance and overall acceptability while controlled (T₀) 7, 7, 7.5 and 7 obtained for flavour and taste, body and texture, colour and appearance and overall acceptability respectively. This indicate that the experimental sample (T₃) Ajwain leaves Biscuit was found to be fallen under category of “Like Very Much to be extremely”.

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