



AGRI MAGAZINE

(International E-Magazine for Agricultural Articles)

Volume: 02, Issue: 07 (July, 2025)

Available online at <http://www.agrimagazine.in>

© Agri Magazine, ISSN: 3048-8656

Shrimp Crackers with Mint Flavouring Agents

*Chetan DM

Department of Fish Processing Technology, College of Fisheries, Mangalore,
Karnataka Veterinary Animal and Fisheries Sciences University, Bidar, India

*Corresponding Author's email: chetandm05@gmail.com

Shrimp crackers are popular snack items in many Asian countries, made primarily from shrimp meat and starch. These are known for their crisp texture and seafood flavor. Incorporating natural flavouring agents like mint (*Mentha sp.*) enhances not only the sensory qualities but also the functional properties, owing to its antioxidant, antimicrobial, and digestive benefits. The use of mint also adds a refreshing aroma and can cater to health-conscious consumers seeking functional foods.

Objectives

- To develop shrimp crackers incorporated with mint powder as a natural flavouring agent.
- To evaluate the physicochemical, sensory, and functional properties of mint-flavoured shrimp crackers.
- To study the shelf-life and consumer acceptability of the product.

Ingredients

Ingredient	Quantity (for 100g dough)
Shrimp meat (minced)	40 g
Tapioca starch	50 g
Salt	1.5 g
Sugar	1 g
Mint powder (dried)	2.5 g
Water	60 ml (adjustable)

Materials and Methods

Preparation of Mint Powder

- Fresh mint leaves are washed and shade-dried for 4–5 days.
- The dried leaves are powdered using a grinder and passed through a fine sieve.
- The mint powder is stored in an airtight container until use.

Preparation of Shrimp Crackers

- Shrimp Meat Processing: Fresh shrimp is washed, de-shelled, deveined, and minced.
- Dough Preparation: Minced shrimp, starch, salt, sugar, and mint powder are mixed. Water is added gradually to form a dough of smooth consistency.
- Steaming: The dough is rolled into a cylindrical shape and steamed at 100°C for 30–45 minutes.
- Cooling and Slicing: The steamed rolls are cooled and sliced into thin chips (2–3 mm thickness).
- Drying: The slices are sun-dried or mechanically dried at 50–60°C for 6–8 hours until brittle.
- Frying: The dried chips are deep-fried in hot oil at 180°C for 10–15 seconds until they puff.

- Packaging: The crackers are cooled, packed in airtight pouches, and stored at room temperature.

Functional Properties of Mint

- Antioxidant: Slows down lipid oxidation in crackers.
- Antimicrobial: Prevents spoilage and extends shelf life.
- Digestive aid: Enhances palatability and helps in digestion.
- Flavor enhancer: Adds a refreshing taste and aroma.

Sensory Evaluation

The mint-flavored shrimp crackers are evaluated for:

- Color and appearance
- Aroma
- Texture
- Taste
- Overall acceptability

(using a 9-point hedonic scale by a panel of 10 trained members)

Nutritional Analysis (per 100 g)

Nutrient	Estimated Value
Protein	12–15 g
Fat	18–20 g
Carbohydrates	60–65 g
Fiber	2–3 g
Energy	~450 kcal

Shelf Life Study

- Stored at room temperature in airtight packaging.
- Observed for sensory qualities, rancidity (peroxide value), and microbial load every 15 days for 3 months.

Conclusion

The incorporation of mint powder into shrimp crackers not only enhances the sensory appeal but also imparts functional benefits. This value addition can be a potential product for health-conscious markets.

References

1. AOAC (2016). Official Methods of Analysis.
2. Ghosh, S., et al. (2020). "Utilization of Herbal Extracts in Seafood." Journal of Food Processing.
3. Functional Properties of Mint in Seafood. Indian Journal of Fisheries (2022).