

COMPOSITION OF MUD CLAM SEAFOOD LOAF

TECHNICAL FIELD

5 The present utility model relates generally to seafood-based food products, and more particularly to the utilization of mud clams as the primary ingredient in the preparation of a seafood loaf for human consumption. This utility model introduces a nutritious and flavorful alternative to conventional meatloaf and seafood dishes by incorporating mud clams with a combination of vegetables and spices. Mud clams are
10 rich in protein, iron, and essential minerals, making them a valuable ingredient for health-conscious consumers. The mud clam seafood loaf offers a convenient, ready-to-eat option that highlights the culinary potential of locally sourced shellfish.

BACKGROUND OF THE UTILITY MODEL

15 Seafood loaves are savory dishes typically made by combining minced or ground seafood with a variety of seasonings, binders, and extenders to form a cohesive, flavorful loaf. These products are often baked or steamed and served sliced, providing a convenient and nutritious alternative to traditional meatloaf. Commonly used seafood ingredients include fish, clams, or shellfish, complemented by vegetables and spices to
20 enhance flavor and texture.

 Mud clams, locally known in the Philippines and other Southeast Asian countries, are bivalve mollusks valued for their tender texture and rich, briny taste. They are a good source of high-quality protein, omega-3 fatty acids, iron, and other essential nutrients. Despite their nutritional benefits and culinary potential, mud clams remain underutilized
25 in processed food products.

 This utility model focuses on the development of a mud clam seafood loaf, ready-to-eat seafood product that incorporates mud clams with all-purpose flour, black pepper, carrot, potato, egg, and sugar. The combination of these ingredients results in a savory, moist loaf that highlights the natural flavor of mud clams while offering an innovative
30 seafood option.

 One such disclose by patent number CN105011008A the meat loaf comprising wheat loaf, sweet potato powder, silver carp meat without fish skin and fish bones, streaky pork, egg white, salt, fresh ginger, cold water at normal temperature and egg yolk. Another

mud clam loaf disclosed by espacenet number KR101723430B1 comprising paprika, cooking liquor, cream, and gelatin. One more loaf disclosed by espacenet number KR101064565B1 short-necked clam, the cannonade, and the meat of fish.

While these prior arts demonstrate a variety of approaches to seafood loaf production, none specifically utilize mud clams in combination with common kitchen vegetables and local spices such as carrot, and potato to create a Filipino-inspired seafood loaf. The present utility model addresses this gap by offering a locally relevant, nutritious, and flavorful mud clam seafood loaf that can serve as a practical and marketable food innovation.

SUMMARY OF THE UTILITY MODEL

The present utility model relates to a unique seafood-based loaf made primarily from mud clams, offering a nutritious, flavorful, and sustainable protein source. The mud clam seafood loaf is formulated to enhanced the natural taste of clams while incorporating complementary ingredients such as binding agents, seasonings, and other seafood or plant-based components for improved texture and flavor.

The primary objective of this utility model is to create a convenient, ready to cook or ready-to-eat seafood product that caters to health conscious consumers, seafood enthusiasts, and those seeking alternative protein sources. Additionally, this innovation aims maximize the utilization of mud clam, an often underutilized shellfish, promoting sustainability in the seafood industry. The loaf can be produced in various forms, including fresh, frozen, or canned, making it suitable for diverse culinary applications and commercial food markets.

The claimed utility model offers the advantage of utilizing mud clams, a locally abundant and underutilized resource in Southeast Asia, to create a unique and flavorful seafood loaf. It benefits from incorporating common kitchen vegetables like carrot and potato, making it more nutritious and accessible compared to prior arts. Unlike CN105011008A, KR101723430B1, and KR101064565B1, this model emphasizes a locally inspired flavor profile suited to Filipino tastes, enhancing cultural relevance.

The advantages include the simplicity of ingredients, ease of preparation, and a focus on showcasing the rich, briny flavor of mud clams. The benefits are its practicality as a ready-to-eat meal, nutritional value from high-quality protein and essential nutrients,

and marketability as an innovative alternative to traditional seafood and meat-based loaves.

DETAILED DESCRIPTION OF THE UTILITY MODEL

5 Washing the mud clams thoroughly under running water to remove sand and impurities. Boiling the clams in a pot of water until they open, ensuring they are fully cooked and safe for consumption. Extracting the clam flesh from the shells, discarding any unopened clams. Place the collected flesh in a bowl and set aside.

 Peeling and dice the carrots and potatoes into small, uniform pieces for even cooking. Finely chop the onion, garlic, and bell pepper.

10 Heating a small amount of oil in a pan. Adding the onion, garlic, and bell pepper, sautéing until they become fragrant and translucent. Incorporating the diced carrots and potatoes, cooking until they start to soften. Adding the mud clam flesh to the pan, mixing well to infuse the flavors.

15 Once sautéed, transfer the mixture to a grinder or food processor. Grind the mixture into a consistent, uniform texture.

 In a large mixing bowl, combine the ground mixture with all-purpose flour to serve as a binder. Season with salt, black pepper, and optional spices to taste. Mix thoroughly until evenly blended.

20 Lightly grease a loaf molder to prevent sticking. Transfer the mixture into the molder, pressing it down gently to remove air pockets and ensure a uniform shape.

 Steaming the loaf for approximately 30 minutes, or until it achieves a firm but moist consistency.

 Remove the steamed loaf from the molder and allow it to cool slightly before slicing.

25 The resulting product is a protein-rich, flavorful seafood loaf with a soft, tender interior and a satisfying bite, ideal for serving as a main course, appetizer, or sandwich filling. This utility model offers an innovative way to utilize mud clams, providing a convenient and appealing alternative to traditional seafood preparations.

The composition of Mud Clam Seafood Loaf consists of:

Ingredients	Quantities (grams)	Weight Composition (%)
Mud Clam	1000	45.41%
Carrots	400	18.17%
Potato	42	1.91%
All-purpose flour	120	5.45%
Red onion	140	6.36%
Garlic	100	4.54%
Black Pepper	150	6.81%
Egg	100	4.54%
Brown Sugar	150	6.81%

5 The organoleptic characteristics was conducted in order to describe the sensory attributes of the product. In terms of appearance, the mud clam loaf is attractive, even consistent, and has an appropriate glossiness. The aroma of mud clam is dominant, has a pleasant aroma, and the tempting smell of mud clam loaf can boost appetite. The taste is palatable, the mud clam is recognized, and the combination of the flavors is proportionate.

10 In order to identify the shelf life of the mud clam seafood loaf, one container was placed in the refrigerator and another container was left at room temperature. the product stored in the refrigerator has a longer shelf life compared to that at room temperature. Therefore, if the mud clam loaf is open and stored at room temperature, it is prone to fungal growth like mold that can cause food spoilage, which will shorten its shelf life.