

TECH OFFER

Nutritious Plant-based Abalone



KEY INFORMATION

TECHNOLOGY CATEGORY:
Sustainability - Food Security
Foods - Ingredients
Foods - Quality & Safety

TECHNOLOGY READINESS LEVEL (TRL): **TRL4**
COUNTRY: **SINGAPORE**
ID NUMBER: **TO175203**

OVERVIEW

The plant-based abalone is designed and prepared with mung beans, which are rich in protein, but the mung bean protein is often treated as a side stream in the industry. The plant-based abalone contains protein content comparable to that of real abalone. It also contains enhanced nutrients such as essential fatty acids which can potentially play a key role in heart health, cancer prevention, cognitive function, skin health, and obesity prevention. In addition, when cooked, this plant-based abalone presents physical properties like the real abalone, at a fraction of the cost. The technology provider is working on larger scale trials to develop optimal methods for central kitchen operations and looking to collaborate with the food industry on R&D and also to license the technology.

TECHNOLOGY FEATURES & SPECIFICATIONS

- Affordable and cost-effective compared to real abalones
- Similar physical properties to real cooked abalones and stable at retort, frozen, thawed and cooked conditions
- Versatility of application, e.g. plant-based scallops

POTENTIAL APPLICATIONS

The applications include but are not limited to:

1. High-end Food in Traditional Festivals
2. Cuisines in Central Kitchens, Bars, Restaurants and Hotels
3. Canned Products
4. Pre-Packaged Frozen Products
5. Snacks (South East Asia)

UNIQUE VALUE PROPOSITION

1. Comparable protein content with real abalone
2. Clean label
3. Affordable price
4. Time-saving production (1/4 or 1/24 time of the growth time of abalone) as compared with cultured abalone
5. Sustainable production valorising food by-products of mung bean protein