

TECH NEED

Seeking Fermentation Technologies for Sustainable Food Production



KEY INFORMATION

TECHNOLOGY CATEGORY:

Sustainability - Food Security

Waste Management & Recycling - Food & Agriculture

Waste Management

Foods - Ingredients

Foods - Processes

TECHNOLOGY READINESS LEVEL (TRL): **TRL6 TO TRL9**

COUNTRY: **SINGAPORE**

ID NUMBER: **TN174439**

BACKGROUND/DESCRIPTION

Fermentation is one of the oldest technologies used in food processing. Traditionally, fermentation was used as a method of preserving food, as well as imparting unique flavor profiles, such as in products like soy sauce or tempeh. In recent years, driven by the demand for a more sustainable food production system, fermentation is also studied for its applications in breaking down organic matter from indigestible to digestible nutrition for human consumption, growing biomass from the microorganisms used in the process, or producing specific target compounds like protein, fat or other nutrients. With Singapore's '30 by 30' goal to produce 30% of our nutritional needs locally and sustainably by 2030, fermentation technologies are primed to play a key role in the food industry.

TECHNOLOGY SPECIFICATION

There is interest to seek out technology owners who have novel and proven fermentation technologies in the fields of alternative proteins, functional health or food side stream valorisation. The technologies can be in the form of:

- 1) Novel works on strains, feedstock or media for food fermentation
- 2) Process and infrastructure technologies to optimize yields and resource efficiency
- 3) Novel ingredients to discover new use cases from new product development trials

These technologies should be available for technology collaborations. The modes of technology collaborations are: R&D collaboration, IP licensing and acquisition. Suitable technologies can be placed as Technology Offers on the IPI portal, subject to internal curation and review.

WHAT WE ARE NOT INTERESTED IN

- Commercially available technologies/ ingredients for buy/ sell and distribution.
- Technologies that are not available for Tech Offer placement (not available for R&D collaboration or IP licensing/ acquisition)
- Technologies that are not food-grade

PREFERRED BUSINESS MODEL

- IP Acquisition
- Licensing
- R&D Collaboration