

Tech Offer – Environment Sustainability

Agarwood Fermentation and Oil Extraction

- There are multiple challenges with conventional water fermentation or fungus-assisted fermentation processes, including excessively long soaking time, and lack of scientific optimization.
- TP has developed a fermentation method based on microbial strain isolation. Microbial strains were isolated from agarwood fermentation samples. These strains could next be formulated into seed cultures towards more consistent and faster agarwood fermentation processes.
- An oil extraction method was also developed – the oil extraction method was optimized for small-volume laboratory samples. High-Performance Thin-Layer Chromatography (HPTLC) was optimized to analyze agarwood oil, enabling differentiation of aroma profiles derived from fermentation.

