

AMMONIA-LACED FISH A WORRY? FRET NO MORE!

A team from Muvattupuzha Nirmala College is developing a powder to remove fish adulterants

ASWIN ASOK KUMAR @TPuram

THE recent sinking of a cargo ship off the Kerala coast came as a further blow to Malayalis already being fed with headlines about seizures of formalin- and ammonia-laced marine products. Now, hope is at hand, as a product to remove all such adulterants in your favourite seafood is in the works.

Having recently won funding at the FFS YIP Protothon event conducted by the Kerala Startup Mission (KSUM) and the Kerala Development and Innovation Strategic Council (KDISC), a team of researchers, students, and teachers of Muvattupuzha Nirmala College is developing a lipid-based powder, which could be the next pathbreaking innovation in the field.

"The project, which took three years to prepare, was initially focused on detection of adulteration," said Dr Jijo VJ, assistant professor in the chemistry department.

"Later, the students and researchers suggested that adulteration removal could have higher market demand, so we integrated that aspect as well. This makes our project different from current products on

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Filing for patent

The team is in the process of filing for a patent, with the hope of turning the project into a startup. However, a few more steps are pending before the product can be declared industry-ready. This includes the FSSAI approval, stating its non-toxicity and food-grade nature, and efficacy test by the MPEDA

the market, which only detect toxic substances," he added.

"All one has to do is mix the powder in water and wash the fish in it. The powder is food-grade, so even if it is present in the fish after washing, there won't be any health implications," Jijo claimed. Ten grams of powder in a sachet worth ₹20 would be enough to clean one kilogram of fish, he added.

Speaking about the challenges they faced in the journey, research assistant Anirudhan S said that they had to take addi-



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tional effort for the practical application of theoretical concepts and research.

"Moreover, funding was a key issue; even testing a sample at a recognised lab would go beyond our budget," he said.

However, his teammates, Ann Rose Baby, Arathi Bhadrar, Ardhra Benny, and Anto Joseph, and students and alumni of Nirmala College, explored every possible opportunity to realise the product.

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a startup. However, a few more steps are pending before the product can be declared industry-ready. This includes the approval of the Food Safety and Standards Authority of India (FSSAI), stating its non-toxicity and food-grade nature, and efficacy test by the Marine Products Exports Development Authority (MPEDA).

Anirudhan said, "We are trying new combinations, proportions, and methods to improve the product, which could bring in revolutionary change in this area," he said.