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Research Team Led by NTU Singapore Produces Oil from Microalgae to Replace Palm Oil in Food Production

March 30, 2022

To heavy

NTU Singapore scientists have developed a method to effectively produce and extract plant-based oils from a type of common microalgae. Photo Source: NTU Singapore

A team of scientists led by Nanyang Technological University, Singapore (NTU Singapore) has developed a method to

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habitat of endangered native wildlife.

The NTU team added pyruvic acid to a solution with the algae *Chromochloris zofingiensis* and exposed it to ultraviolet light to stimulate photosynthesis. The team developed a cost-cutting innovation to replace the microalgae culture medium with fermented soybean residues while improving the yield of microalgae biomass. After 14 days, the microalgae was washed, dried, and treated with methanol to break down the bonds between the oils and algae protein, and the oil was extracted. This innovation could be a possible alternative to the cultivation of palm trees for oil.

The NTU team also developed a process to produce pyruvic acid, the key reaction ingredient needed to cultivate microalgae oil.

For more details, read the media release from NTU Singapore.

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