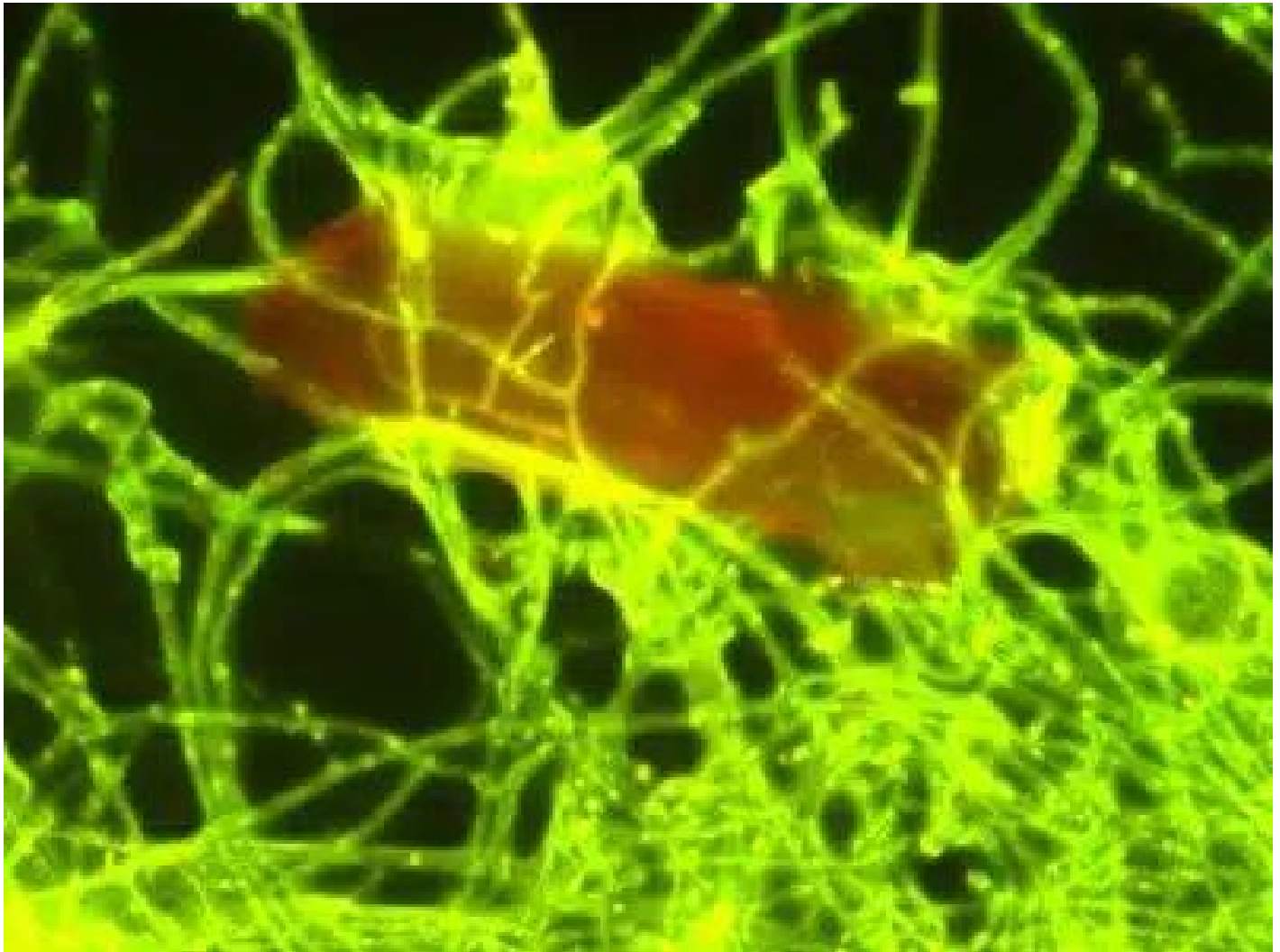


Parengyodontium album

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About Parengyodontium album:

- It is a **marine fungus** that can **break down plastic polyethene (PE)**, the most common plastic in the ocean.
- It was discovered by **Marine microbiologists** from the **Royal Netherlands Institute for Sea Research (NIOZ)**.
- In this **bioremediation** process, the **PE-derived carbon** is converted into the fungal biomass of *P. album*, serving as its energy source.
- Initial photodegradation of PE by **UV sunlight** is crucial for this process. It makes the fungus useful to degrade the floating oceanic plastic litter.
- Humans produce over **400 billion kilograms** of plastic annually, much of which ends up in the ocean.

Considering **fungi** as the '**masters of degradation**' that they utilise a plethora of digestive enzymes for plastic degradation, researchers expect that there could be more plastic-degrading fungi in the **deeper parts of the ocean**.

Q1. What is the bioremediation process?

Bioremediation is a process that uses microorganisms, fungi, or plants to break down pollutants in soil, water, or air, converting them into non-toxic substances through natural biological processes.

Source: **Fungus Breaks Down Plastic Polyethylene in the Ocean**

Source: <https://vajiramandravi.com/current-affairs/parengyodontium-album/>

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