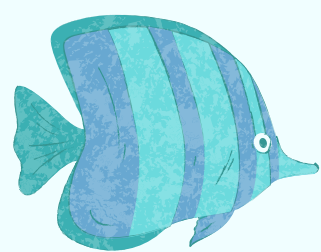


CORAL CUISINE

HOW TROPICAL CORALS FEAST FOR FUEL

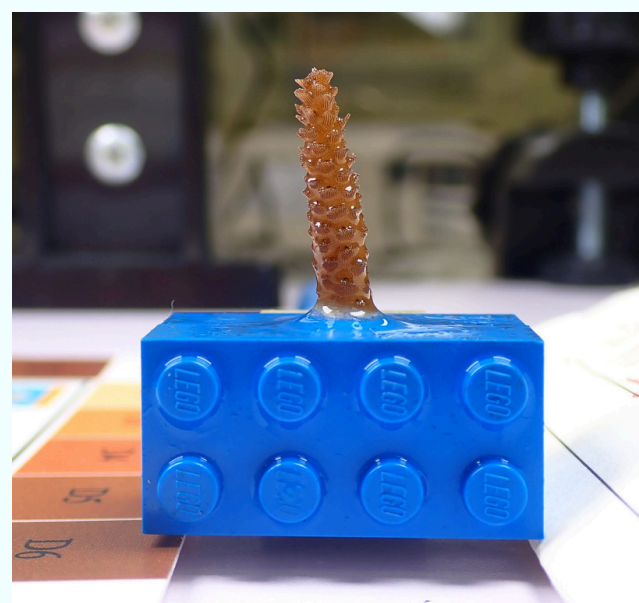
Did you know?

Corals can eat! The capture prey using tentacles.



Did you know?

Laboratories around the world are conducting aquarium-based studies to find ways to grow small pieces of coral through feeding, to sizes large enough for transplantation back into the wild! Some labs are even growing coral fragments on pieces of Lego!



- Corals are majorly diverse marine species inhabiting waters across the globe, with roles varying from primary producers and scavengers to reef-builders (Houlbrèque & Ferrier-Pagès, 2009).
- One key characteristic observed in many corals is their ability to interchange between different autotrophic (self-feeding via photosynthesis) and heterotrophic (feeding via external sources) processes to obtain essential nutrients, depending on the state of their surrounding external environment (Fox et al., 2018).
- For reef-building corals, nutrients obtained via autotrophy are provided by symbiotic organisms that live in the coral's tissue. In exchange for providing energy to the corals, these symbionts receive both sheltered habitats on the coral structure and by-products from coral metabolism for use in their own metabolic processes (Jain et al., 2021).
- Under sub-optimal conditions, e.g., low light conditions in deeper or highly turbid waters, heterotrophy can become vital for supplying energy and nutrients to these corals.
- With the worlds oceans warming, heterotrophy is expected to play an increasingly important role in the survival of coral reefs.
- Many studies have observed tropical corals succeeding at feeding, growing, and increasing resilience in laboratory and aquarium environments, showing optimistic applications of coral feeding research for reef restoration worldwide.

Did you know?

In the wild, corals feed on a variety of sources including suspended organic matter, phytoplankton and zooplankton (Ladd & Shantz, 2020).



Did you know?

A bleached coral is not necessarily a dead coral. It is one that as lost its symbionts due to warming sea temperatures and stress, so can no longer make its own food.

