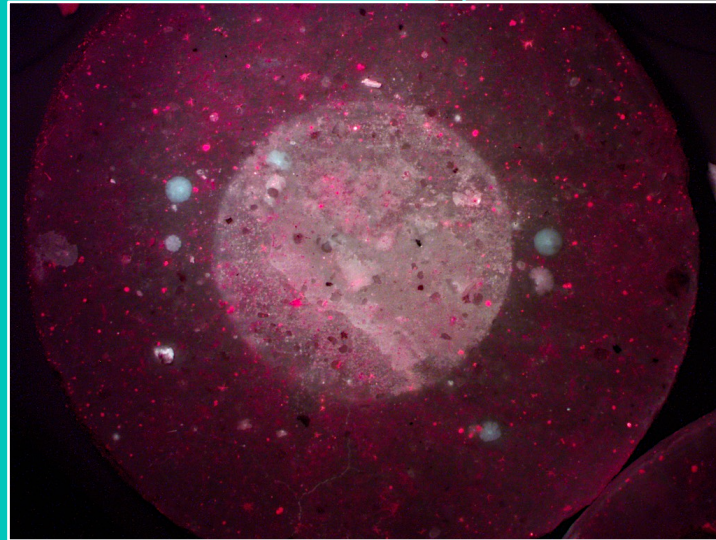


Enhancing CORAL SURVIVAL through anti-biofouling

Tropical coral reefs are suffering from many human induced stressors worldwide. Carbon emission induced water temperature rise, ocean acidification, nutrient and waste water discharges, chemical discharges, sedimentation, habitat loss due to construction works and overfishing are only a few to mention. Scientists are developing and exploring new methods to assist corals in order to withstand and overcome these threats.

The bottleneck and most fragile part in the puzzle of coral reef survival is reproduction. Corals will only sustain, if their potential to grow is maximized.

Corals and their offspring suffer from increased algae growth due to nutrient enrichment from land and overfishing of fish and other herbivorous marine animals.



If herbivorous species are gone, algae become predominant and overgrow corals and their small sized offspring. The competition for light and space is won by algae.

In my PhD project, I investigate new anti-biofouling coatings, which aim to inhibit algae growth and therefore create a favourable environment for the coral offspring.

The photo was taken under a microscope with UV light and shows an uncoated control area (circle) in the middle and a coated antifouling area around the inner circle. The green fluorescent dots are settled coral larvae.