A thin film to save Great Barrier Reef

Live coral in ‘sun shield’ trials in Townsville

An ultra-fine biodegradable film some 50,000 times thinner than a human hair could be enlisted to protect the Great Barrier Reef from environmental degradation, researchers said on Tuesday.

The World Heritage-listed site is reeling from coral bleaching due to warming sea temperatures.

Scientists from the Australian Institute of Marine Biology have been buoyed by test results of a floating “sun shield” made of calcium carbonate that has been shown to protect the reef from the effects of bleaching. “It’s designed to sit on the surface of the water above the corals, rather than directly on the corals, to provide an effective barrier against the sun,” Great Barrier Reef Foundation managing director Anna Marsden said.

The trials on seven different coral types found that the protective layer decreased bleaching of most species, cutting off sunlight by up to 30%. “It (the project) created an opportunity to test the idea that by reducing the amount of sunlight from reaching the corals in the first place, we can prevent them from becoming stressed which leads to bleaching,” Ms. Marsden said.

Ms. Marsden said it was impractical to suggest that the “shield” — made from the same material found in coral skeletons — could cover the entire 348,000 square-kilometre reef. “But it could be deployed on a smaller, local level to protect high-value or high-risk areas of reef,” she added.

Open source record of plants with “druggable” chemicals will help validate traditional systems

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