The Hindu 21-02-19, p-18

Meet the sea squirt, sucking up plastic particles from the sea

It can filter fibres in water and store them in its tissue

REUTERS

A rubbery sea creature with an irritating habit of clinging to ships and invading beaches could help measure plastic pollution as it can filter tiny particles from the ocean and store them in its soft tissue.

Israeli researchers have found that ascidians — round, palm-sized animals also known as sea squirts — can thrive in dirty industrial areas and pristine waters alike, allowing them to detect and analyse waste and its impact in various regions.

One truck every minute

A staggering amount of plastic flows into the ocean each year. The United Nations says it is as if a garbage truck



An Israeli researcher holding a sea squirt removed from the Red Sea. • REUTERS

full of plastic was dumped into the water every minute, a rate some estimates show could lead to oceans carrying more plastic than fish in 30 years. But the long-term impact of the waste, particularly tiny pieces called microplastic, is still not fully understood. "[Sea squirts] just sit in one place all their life and filter the water, like a pump," said Gal Vered of Tel Aviv University, and who copublished the researchers' findings in the journal *Marine Pollution Bulletin*. "They can really give us a picture of what the whole reef, the whole ecosystem felt during its life."

As a bonus, sea squirts are related in evolutionary terms to human beings. So studying them and the plastic inside them could be more insightful than looking at creatures like fish. "Although we don't look alike at all, we have similar systems," said Noa Shenkar, of Tel Aviv University's zoology department and museum of natural history.