



Fluorescent dye | Photo source Pixabay

FLUORESCENT DYE HELPS IDENTIFY MICROPLASTICS IN OCEAN WATER

 SPORT & FITNESS

The dye could help find hidden plastic that is having a hugely negative impact on underwater environments and its inhabitants.

The footprint of plastic has been a popular topic of late, with celebrities and TV shows choosing it as a focus of conversation. Scientists predict only 1 percent of plastic waste dumped in the ocean has been found, but new research by the [University of Warwick](#) may have found a way to find the missing 99 percent.

Researchers have found that using a fluorescent dye can help identify fragments of microplastics as small as 20 micrometres, which is comparable to the width of a human hair. The dye binds plastic particles, making them easily visible under a fluorescence microscope. This helps scientists distinguish them from other natural materials and quantify their presence.

The team tested their method on the English coast, taking samples of sea water and extracting microplastics visible to the human eye. They then applied the dye, and found significantly more plastics within the sample than initially predicted. The researchers also found that the microplastics found in the samples were predominantly polypropylene, which is commonly used in packaging and food containers. This is solid evidence that consumer habits are having a direct impact on nature.

As the public become more aware of the impact plastic can have on the environment, more alternatives to the material are cropping up on the market. A smart water bottle that [helps users find the nearest refill station](#), therefore eliminating the need to buy a plastic bottle of water, and a [compostable bottle](#) that helps in the quest to reduce plastic pollution are recent eco-friendly offerings. How could your business help in the fight against plastic?

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