

Filtering the Invisible: Evaluating Natural Materials for Microplastic Removal

McElroy, Sayre (School: Cascade Public Schools)

Microplastics are tiny pieces of plastic that can end up in our water, making their way into rivers, lakes, and even the ocean. These small particles are a big problem because they don't break down easily and can harm wildlife and ecosystems. In this experiment, I tested different materials to see which one works best at filtering microplastics from water. To create a microplastic suspension, I blended plastic pieces with water and then poured the mixture through various filtration materials, such as cloth, sand, activated charcoal, and coffee filters. I then compared how well each material removed the plastic particles. The results of this experiment could help us understand simple and effective ways to reduce microplastic pollution. By finding the best filtration method, we might be able to improve water cleaning techniques and reduce the impact of plastic waste on the environment.

Awards Won:

