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The Analysis of Microplastics Found in the Flowers of Rhode Island

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The Analysis of Microplastics Found in the Flowers of Rhode Island

Sponsor: *Matthew Kieseewetter (Chemistry)*

Plastic production, and resulting environmental plastic pollution, have increased exponentially since the Industrial Revolution. To better understand the sources, impacts, transportation, and transformation of microplastics in the ecosystem, further research is necessary. To investigate the extent of microplastic pollution in Rhode Island, flower samples were analyzed using light microscopy. The length and quantity of microplastic fibers were recorded and fibers were characterized using RAMAN spectroscopy. The instrumental analysis of microplastic fibers reveals information about their chemical makeup and provides insight into their potential ecosystem toxicity. The quantification and characterization of microplastics are necessary to inform future policy and practices regarding proper plastic disposal in efforts to minimize environmental damage.