

Micro Plastics Assessment in Cyprus Agriculture Environment

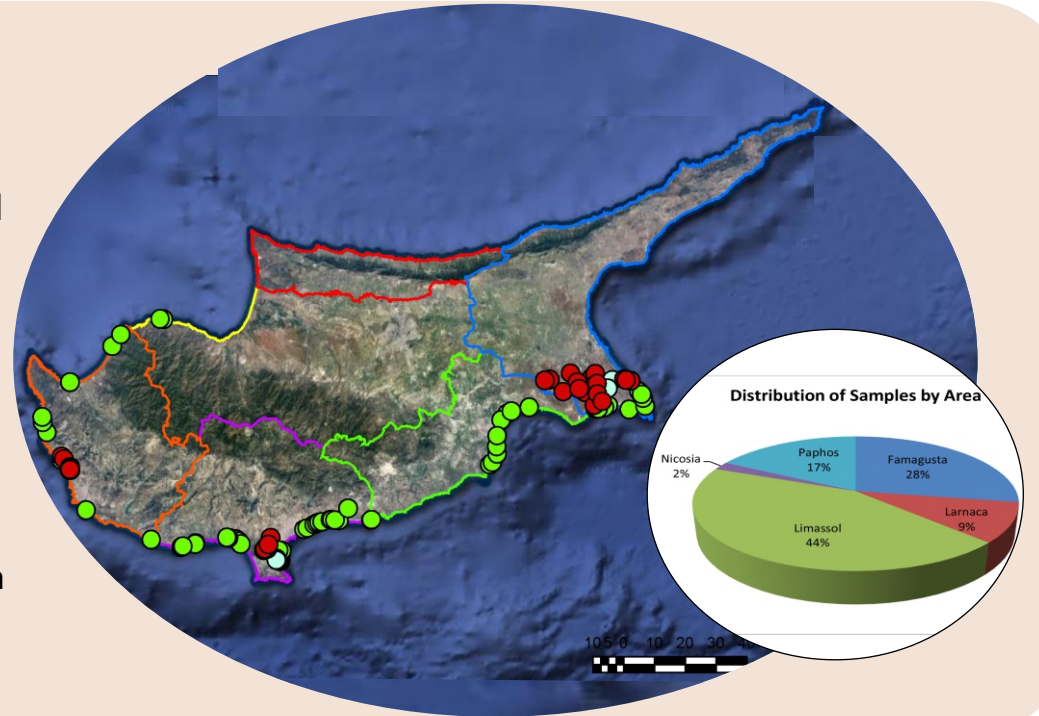
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Research Scope & Methodology

- The aim of this research was the strategic analysis and mapping of MPs from soil samples taken from agricultural areas of Cyprus.
- For this research several samples were taken from rural areas of Cyprus
- The analytical protocol involved MP extraction from dried sediments using saturated NaCl solution and a shaking technique (density separation process). Is also involving soil particle size distribution for soil classification and mapping through Arc GIS software

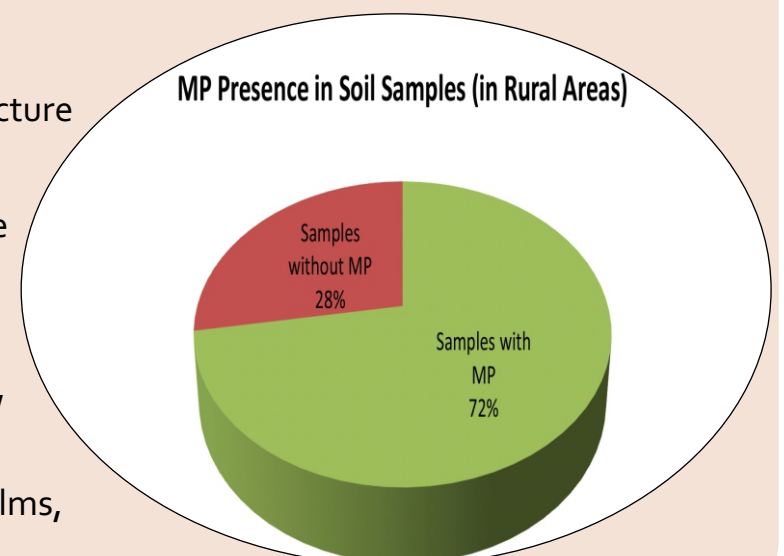


Methodology



Results - Conclusions

- The research indicated the presence of MPs in more than 70% of crops
- In the top soil (0–20 cm), the abundance of MPs is higher than in other soil structure layers
- The particle size distribution of MP depends on the type of plastic, the time elapsed since their usage, and the degree and duration of environmental exposure
- In a fine grained soil most plastics are classified as micro and nano plastics, while larger sized plastics are found in sandy soils
- In agriculture soils, most microplastics are smaller than 0.5mm consisting of films, PE and PP



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