



Status of Microplastic Research in South Africa

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REPUBLIC OF SOUTH AFRICA



NATIONAL GUIDANCE FOR PLASTIC POLLUTION HOTSPOTTING AND SHAPING ACTION

FINAL REPORT FOR SOUTH AFRICA

December 2020 (updated in April 2021)

Implemented with  + Quantis

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SOUTH AFRICA'S NEGOTIATING MANDATE FOR THE 3RD SESSION OF INTERGOVERNMENTAL NEGOTIATING COMMITTEE ON PLASTIC POLLUTION

07 NOVEMBER 2023

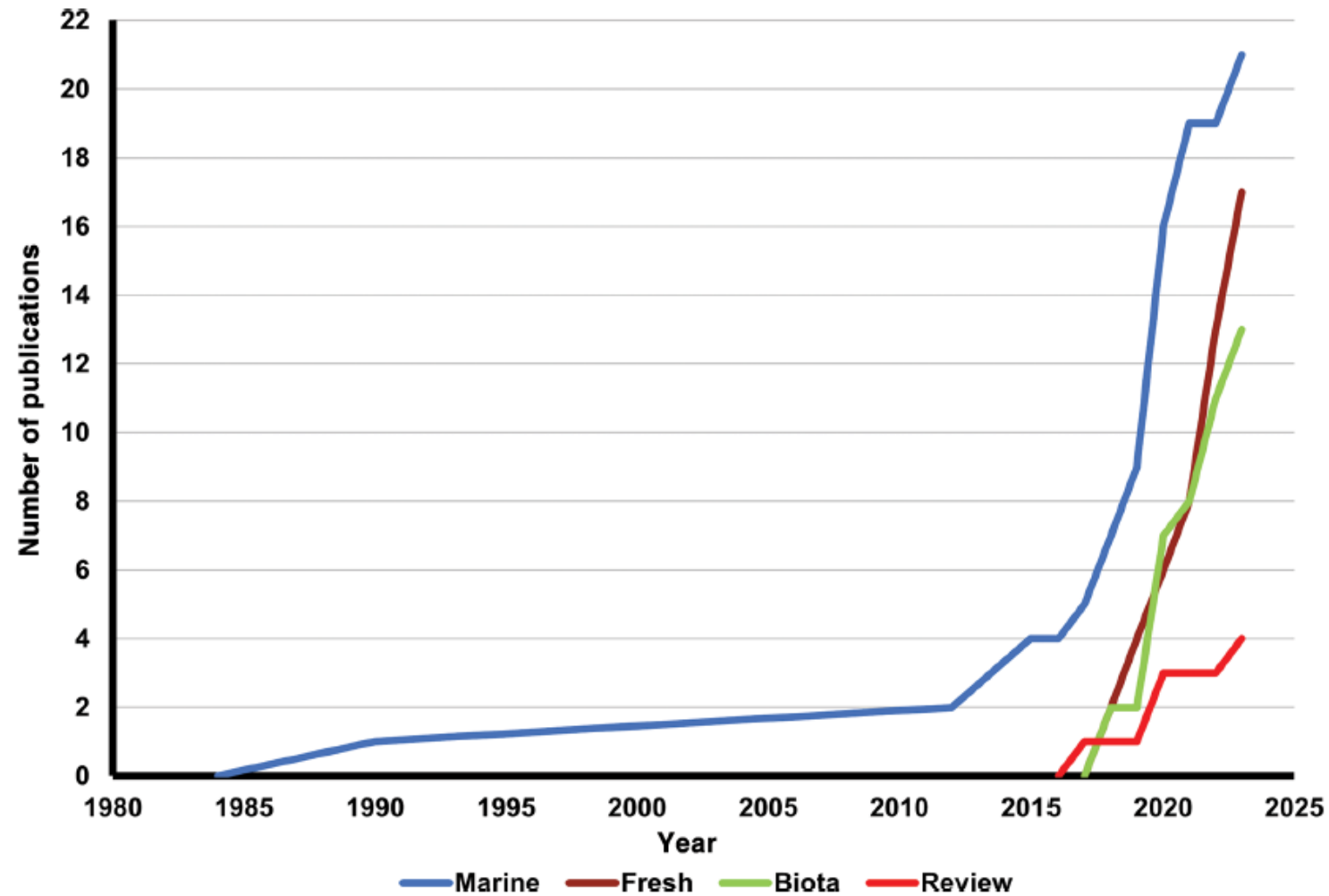


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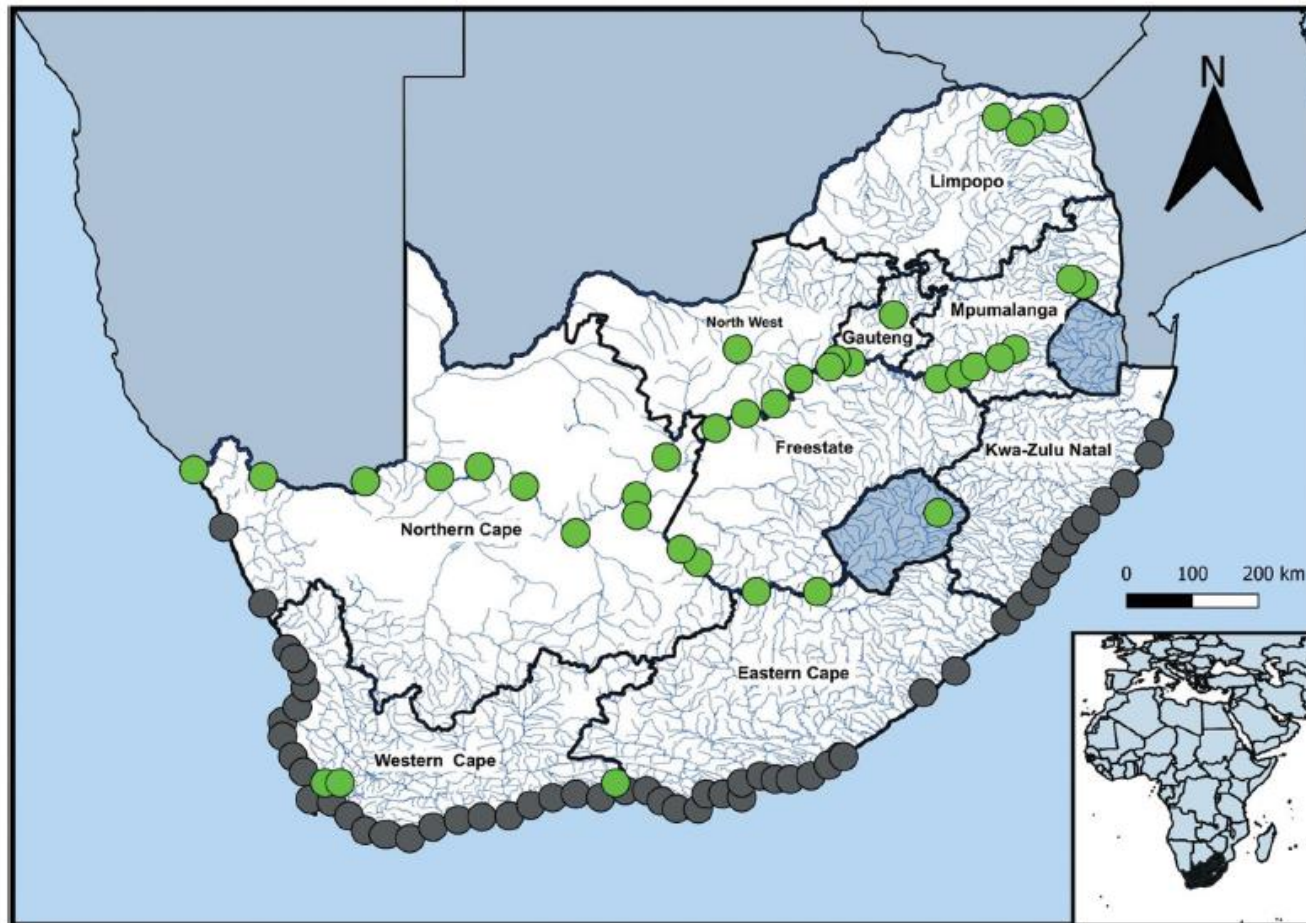
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Microplastic research in South Africa



Spatial coverage of microplastic research



Scope of studies:

Studies have largely been restricted to the investigation of microplastics in water column/sediment with *few studies focussing on biology*

Limited spatial/temporal coverage

Focused mainly on ports/harbours- proximity to coastal universities (e.g. Cape Town and Durban)

Virtual absence of studies in estuaries/open ocean



Methodologies

Sediment: sieving/density separation (NaCl)

Water column: bulk water
samples/trawls/plankton nets-sieving/density
separation

Biology: digestion of samples (KOH)

Identification: *visual*/FT-IR/GC-MS/SEM-EDS

Future research initiatives

Establishment of facilities

Funded programs to investigate ecological impacts of microplastics



♡ 1

Cutting-Edge Laboratories Set to Lead Marine Research for Societal Advancement in South Africa

28 April 2023

**UWC Lab to Help Understand
Microplastics for Better Ecosystem**

