

Supplemental Table 1. Review of microplastics (MPs) in fish species from the Caribbean Sea using different analytical methods. For comparison across publications, we include the sample size per species (n), percent incidence of MPs per species (%), average load of MPs per individual $\pm$ standard deviation (Avg $\pm$ St Dev), and the dominant shape and color of MPs as reported in each paper.

nr = value was not reported in the previous study

Method	Species	Location	n	MPs (%)	Avg $\pm$ St Dev ^a	Shape ^b	Color ^b	Publication ^c
Dissection and 70% HNO ₃	<i>Pterois</i> spp.	La Parguera, Puerto Rico	56	98	6.4 $\pm$ 3.2	Fibers	Blue Black Clear	This study
Dissection	<i>Pterygoplichthys multiradiatus</i> ^d	Río Bayamón, Puerto Rico	30	87	4.9	Fibers	nr	Lozada-Gomez and Perez-Reyes 2023
		Río Piedras, Puerto Rico	12	83	2.8	Fibers Fragments	nr	
	<i>Megalops atlanticus</i>	Santa Marta, Colombia	63	25	1.5	Fibers	Blue	Garcés-Ordóñez et al. 2022
	<i>Oreochromis</i> sp.		60	42	1.3	Fibers	Blue	
	<i>Cathorops mapale</i>		45	11	1.0	Fibers	Blue	
	<i>Elops smithi</i>		65	22	1.3	Fibers	Blue	
	<i>Centropomus undecimalis</i>		5	40	1.5	Fibers	Blue	
	<i>Ariopsis canteri</i>		43	28	1.3	Pellets	Clear	
	<i>Eugerres plumieri</i>		61	8	1.0	Fibers Fragments	Blue Clear	
	<i>Mugil incilis</i>		69	10	1.2	Fibers	Black	
	<i>Oreochromis niloticus</i>		63	22	1.1	Fibers	Black	
10% KOH	<i>Albula vulpes</i>	Veracruz, Mexico	8	nr	4.75 $\pm$ 3.5	Fibers	Black	Sánchez Hernández, et al. 2021

<i>Ariopsis felis</i>		54	nr	5.52 ± 4.7	Fibers	Black
<i>Brevoortia gunteri</i>		2	nr	1.57 ± 3.8	Fibers	Black
<i>Caranx hippos</i>		6	nr	4.33 ± 3.8	Fibers	Black
<i>Centropomus pectinatus</i>		4	nr	8 ± 9.7	Fibers	Black
<i>Conodon nobilis</i>		27	nr	6 ± 8.7	Fibers	Black
<i>Cynoscion arenarius</i>		20	nr	4.15 ± 2.9	Fibers	Black
<i>Diapterus auratus</i>		33	nr	5.51 ± 5.2	Fibers	Black
<i>Mugil cephalus</i>		4	nr	4 ± 5.4	Fibers	Black
<i>Mugil curema</i>		3	nr	0.66 ± 0.6	Fibers	Black
<i>Mugil cephalus</i>	Southeastern Florida	52	98	8.57 ± 10.0°	Fibers	Clear
<i>Herengula jaguana</i>		52	100		Fibers	Clear
<i>Strongylura notata</i>		52	100		Fibers	Clear
<i>Logodon rhomboides</i>		40	100		Fibers	Clear
<i>Diapterus auratus</i>		52	100		Fibers	Clear
<i>Centropomus undecimalis</i>	Isla Grande, Colombia	10	100	0.9 ± 0.7	Fragments Fibers	Black
<i>Caranx hippos</i>		10	100	0.7 ± 0.6	Fragments Fibers	Black

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10 M NaOH	<i>Lutjanus synagris</i>	Cispata, Colombia	10	100	0.9 ± 0.9	Fragments Fibers	Black	Garcés-Ordóñez et al., 2020 ^f
	<i>Centropomus undecimalis</i>		10	100	0.9 ± 1.3	Fragments Fibers	Black	
	<i>Eugerres plumieri</i>		10	100	0.7 ± 0.7	Fragments Fibers	Black	
	<i>Archosargus rhomboidalis</i>		10	100	1.0 ± 0.9	Fragments Fibers	Black	
	<i>Notarius bonillai</i>		13	8	<1	Fibers	nr	
	<i>Caranx hippos</i>		1	100	2	Fragments	nr	
	<i>Elops saurus</i>		7	14	<1	Fibers	nr	
	<i>Centropomus undecimalis</i>		33	3	<1	Films	nr	
	<i>Centropomus pectinatus</i>		1	100	5	Films	nr	
	<i>Megalops atlanticus</i>		20	35	<1	Fibers Films	nr	
	<i>Mugil incilis</i>		128	5	<1	Fragments Films	nr	
	<i>Caranx latus</i>		3	33	2.7	Fibers Fragments	nr	
	<i>Mugil incilis</i>	Santa Marta, Colombia	46	22	<1	Fibers	nr	Calderon et al. 2019
	<i>Eugerres plumieri</i>		40	5	<1	Fibers	nr	
	<i>Caquetaia kraussii</i>		35	9	<1	Fibers	nr	
	<i>Caranx hippos</i>		19	11	<1	Fibers	nr	

^a Values for standard deviations are provided when available, single values are average MPs per individual.

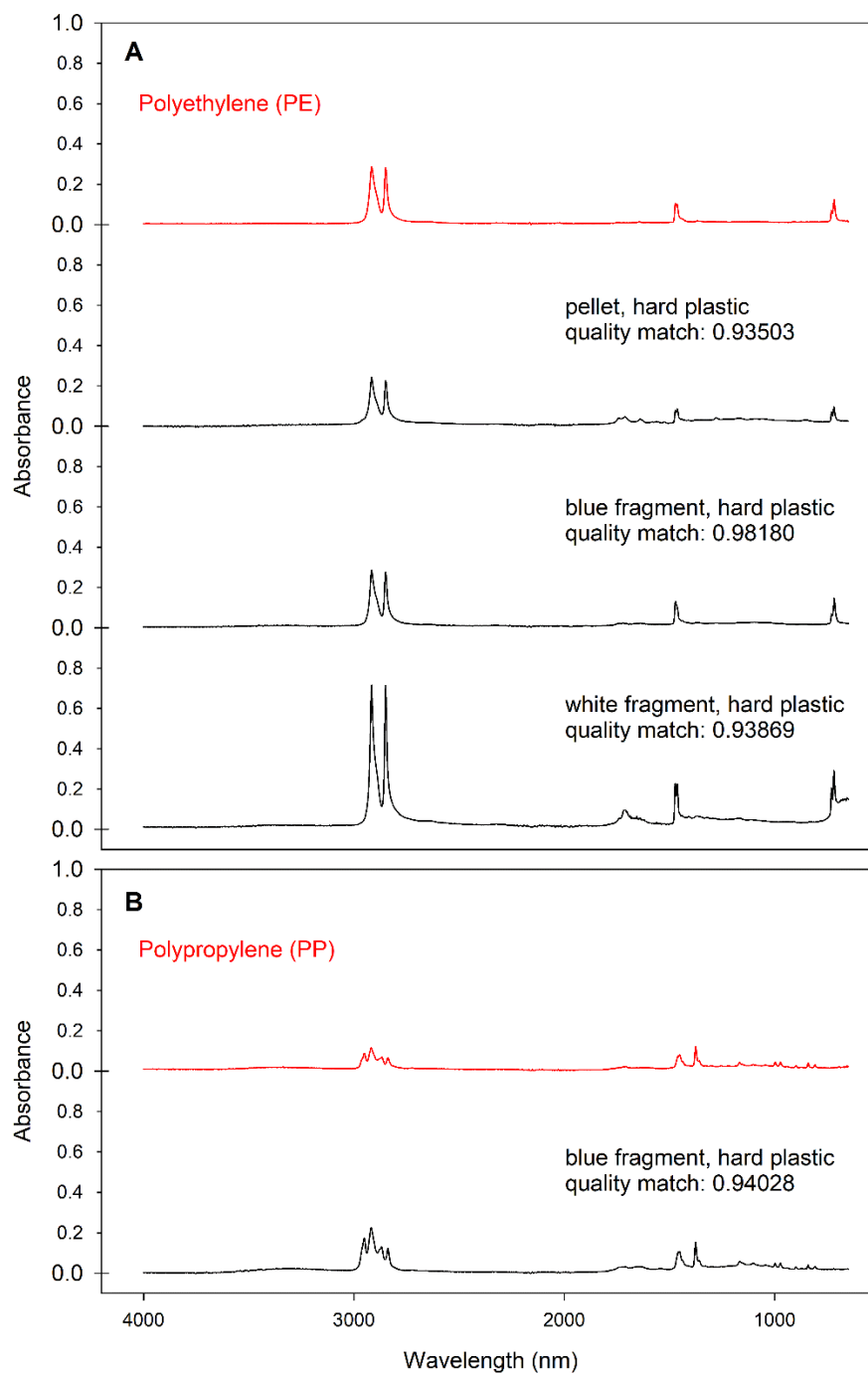
^b Type within each category of shape and color are listed in order of dominance as reported in each study. For clarity, we changed all prior uses of the term ‘filament’ to ‘fiber.’

^c Citations for all publications are included in the main manuscript.

^d Freshwater species, included as the only other fish species to be assessed for MPs in Puerto Rico.

^e McGirl et al. (2024) reports average MPs per individual and standard deviation for all five species in their study combined.

^f We only include fish species from Garcés-Ordóñez et al. (2020) that contained MPs for comparison to our study; an additional 14 fish species were not found with MPs.



Supplemental Fig. 1. FTIR spectra for microplastic (MPs) samples (in black) identified as **(A)** polyethylene and **(B)** polypropylene compared to library reference spectra (in red).