Low Temperature Polyethylene Biodeterioration by Freshwater Microplastics-Associated Bacteria

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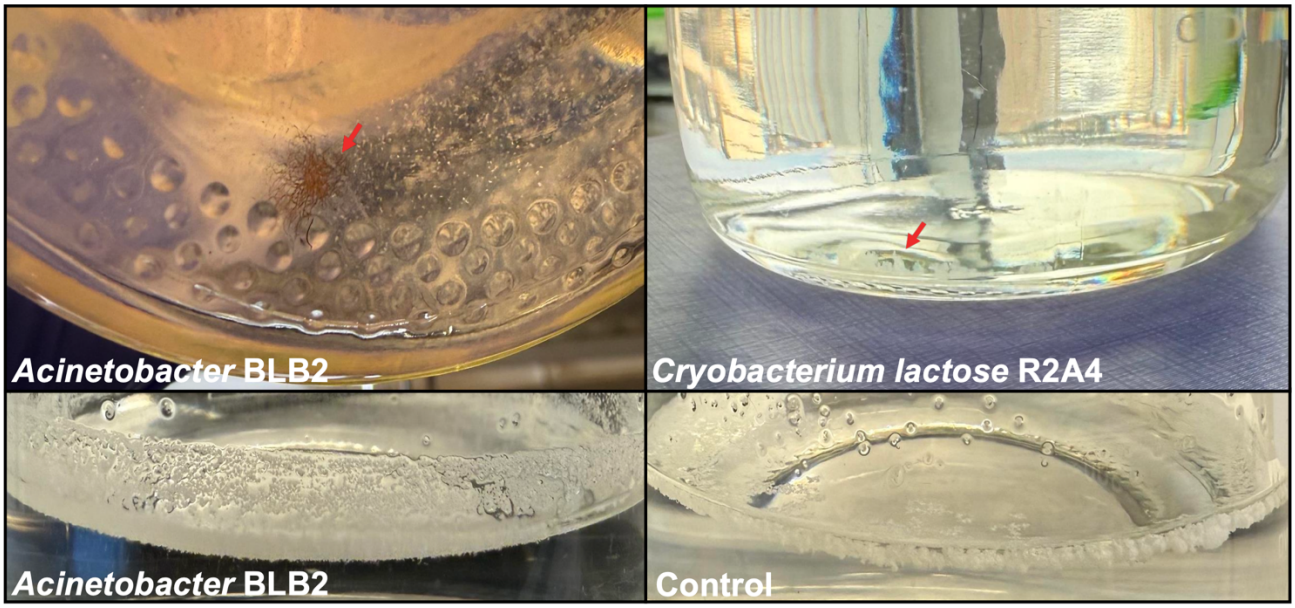
Supplementary Information



Supplementary Figure 1. ***Visual observations of LDPE degradation microcosms.*** (a) *Acinetobacter* BLB2 showing green-brown web-like growth (b) *Cryobacterium* BR2A4 exhibiting translucent floating aggregates (c) *Acinetobacter* BLB2 microcosm highlighting visibly smaller LDPE fragments with increased bulk dispersion compared to (c) control microcosm

Supplementary Data 1. Metadata of the 14 Isolates used for the LDPE degradation experiment.

Supplementary Data 2. Final calculated weight losses of the 14 isolates and experimental control after a seven month incubation period.

Supplementary Data 3. Monthly optical Density (600nm) measurements of microcosms during LDPE degradation experiment.

Supplementary Data 4. Cell densities (cells/mL) of the 14 isolates including standard deviation at months five and six of incubation.

Supplementary Data 5. GCMS results of detected compounds, their assigned classification, and concentration (µg/L) of each based on a C16 response factor after a seven month incubation period.