

Microplastics Release from Conventional Plastics during Real Open Windrow Composting

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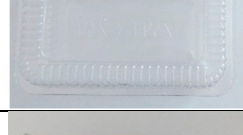

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Supplementary materials

Table S1. Information on plastic particles used in the experiment.

| Polymer Type | Product Type | Weight, g | Thickness, μm | Photo |
|--------------|--------------------------|--------------------|--------------------------|---|
| LDPE | Garbage bag | 0.1151 ± 0.002 | 50 |  |
| HDPE | Garbage bag | 0.0199 ± 0.002 | 10 |  |
| R_LDPE | Garbage bag | 0.0572 ± 0.008 | 26 |  |
| PP_film | Sponge packaging film | 0.0449 ± 0.003 | 20 |  |
| PP_fr | Cottage cheese container | 0.391 ± 0.056 | 160 |  |
| PS | Cake packaging | 0.8657 ± 0.038 | 340 |  |
| PLA | Garbage bag | 0.0412 ± 0.005 | 16 |  |

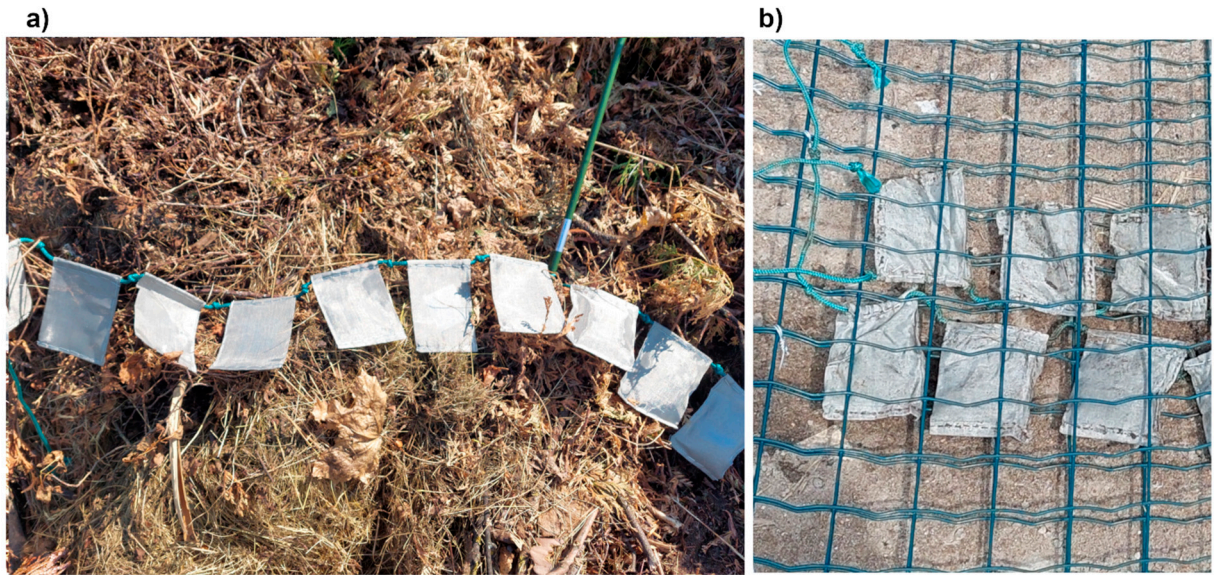


Figure S1. Plastic samples are enclosed in steel meshbags before being buried in the compost pile (a) between steel grids (b).

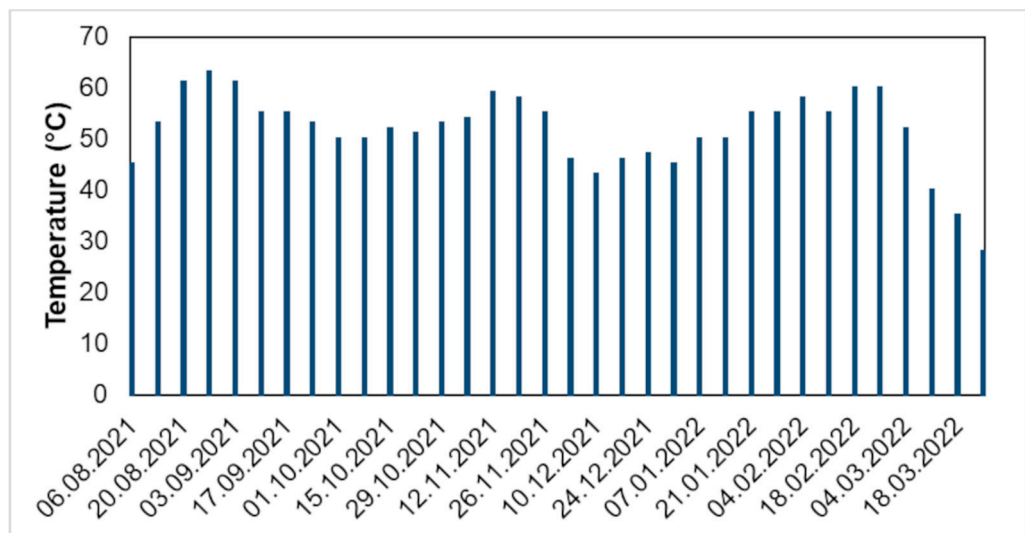


Figure S2. Temperature during composting.

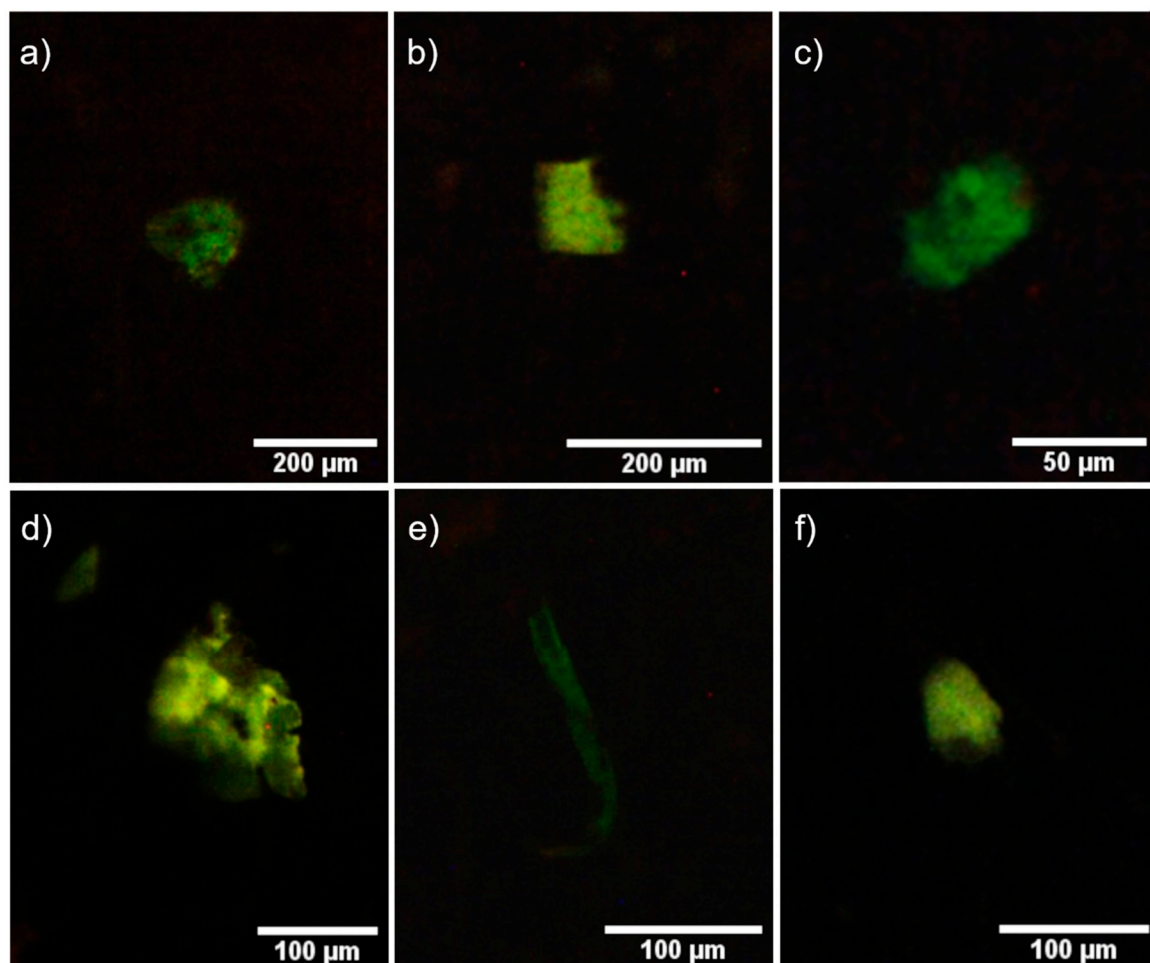






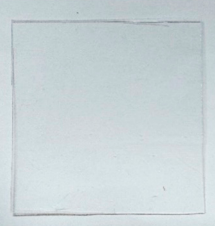







Figure S3. Examples of fluorescence image of (a) HDPE; (b) LDPE; (c) R_LDPE; (d) PS; (e) PP_film; (f) PP_fr.

Table S2. Plastic samples before and after composting.

| Polymer Type | Before | After |
|---------------|---|---|
| HDPE |  |  |
| LDPE |  |  |
| Recycled LDPE |  |  |
| PS |  |  |
| PP_film |  |  |
| PP_fr |  |  |