

Table S3. Top plastic-degrading fungal strains identified in this study. Weight-loss (%) values are shown as Means $\pm$ standard deviations for each plastic type and exposure time

Plastic type	Stage	Species	ID	Weight-loss (%)
HDPE	Early	<i>Penicillium citrinum</i>	SFC20240719-M028	5.35 $\pm$ 1.44
		<i>Penicillium sumatraense</i>	SFC20240719-M039	4.40 $\pm$ 0.54
		<i>Cladosporium punicae</i>	SFC20240719-M014	4.40 $\pm$ 0.54
		<i>Penicillium brevicompactum</i>	SFC20240719-M038	4.09 $\pm$ 1.44
		<i>Penicillium steckii</i>	SFC20240719-M033	4.09 $\pm$ 1.44
		<i>Penicillium citrinum</i>	SFC20240719-M035	4.09 $\pm$ 1.09
		<i>Cladosporium proteacearum</i>	SFC20240719-M022	4.09 $\pm$ 1.44
		<i>Penicillium steckii</i>	SFC20240719-M037	4.09 $\pm$ 0.54
	Mature	<i>Paraconiothyrium cyclothyrioides</i>	SFC20240812-M050	6.29 $\pm$ 0.54
		<i>Trichoderma</i> sp. 6	SFC20240812-M063	5.35 $\pm$ 1.09
		<i>Emericellopsis maritima</i>	SFC20240812-M030	5.35 $\pm$ 1.44
		<i>Fusarium cugenangense</i>	SFC20240812-M033	5.03 $\pm$ 1.44
		<i>Trichoderma</i> sp. 3	SFC20240812-M069	5.03 $\pm$ 1.44
		<i>Penicillium</i> sp. 1	SFC20240812-M022	5.03 $\pm$ 1.96
		<i>Paraconiothyrium</i> sp. 1	SFC20240812-M058	5.03 $\pm$ 1.44
LDPE	Early	<i>Fusarium</i> sp. 4	SFC20240719-M108	2.34 $\pm$ 0.66
		<i>Cladosporium proteacearum</i>	SFC20240719-M122	1.87 $\pm$ 0.93
		<i>Cladosporium pruni-salicina</i>	SFC20240719-M133	1.87 $\pm$ 0.93
		<i>Neopestalotiopsis camelliae-oleiferae</i>	SFC20240719-M107	1.87 $\pm$ 0.93
		<i>Cladosporium pruni-salicina</i>	SFC20240719-M125	1.87 $\pm$ 0.93
		<i>Cladosporium</i> sp. 3	SFC20240719-M129	1.56 $\pm$ 0.54
		<i>Epicoccum latusicollum</i>	SFC20240719-M086	1.56 $\pm$ 0.54
		<i>Penicillium citrinum</i>	SFC20240719-M070	1.56 $\pm$ 1.43
		<i>Trichoderma insigne</i>	SFC20240719-M109	1.56 $\pm$ 0.54
		<i>Trichoderma</i> sp. 1	SFC20240719-M089	1.56 $\pm$ 1.43
		<i>Trichoderma</i> sp. 1	SFC20240719-M105	1.56 $\pm$ 0.54
		<i>Cladosporium pruni-salicina</i>	SFC20240719-M112	1.56 $\pm$ 0.54
		<i>Cladosporium marinum</i>	SFC20240719-M132	1.56 $\pm$ 0.54
		<i>Cladosporium pruni-salicina</i>	SFC20240719-M127	1.56 $\pm$ 1.08
		<i>Cladosporium pruni-salicina</i>	SFC20240719-M130	1.56 $\pm$ 0.54
		<i>Fusarium</i> sp. 2	SFC20240719-M110	1.56 $\pm$ 1.43
PP	Early	<i>Fusarium</i> sp. 12	SFC20240719-M187	0.90 $\pm$ 0.52
		<i>Aspergillus protuberus</i>	SFC20240719-M195	0.90 $\pm$ 0.52
		<i>Aspergillus creber</i>	SFC20240719-M194	0.60 $\pm$ 0.00
		<i>Aspergillus protuberus</i>	SFC20240719-M196	0.60 $\pm$ 0.00
		<i>Penicillium steckii</i>	SFC20240719-M199	0.60 $\pm$ 0.00

	<i>Penicillium citrinum</i>	SFC20240719-M193	0.60 ± 0.00
	<i>Penicillium ibericum</i>	SFC20240719-M198	0.60 ± 0.00
	<i>Penicillium steckii</i>	SFC20240719-M201	0.60 ± 0.00
	<i>Cladosporium pruni-salicina</i>	SFC20240719-M176	0.30 ± 0.52
	<i>Fusarium graminearum</i>	SFC20240719-M185	0.30 ± 0.52
	<i>Mucor</i> sp. 1	SFC20240719-M189	0.30 ± 0.52
	<i>Aspergillus versicolor</i>	SFC20240719-M192	0.30 ± 0.52
	<i>Aspergillus creber</i>	SFC20240719-M197	0.30 ± 0.52
	<i>Penicillium citrinum</i>	SFC20240719-M200	0.30 ± 0.52
	<i>Aspergillus sydowii</i>	SFC20240719-M202	0.30 ± 0.52
	<i>Aspergillus sydowii</i>	SFC20240719-M203	0.30 ± 0.52
	<i>Geotrichum candidum</i>	SFC20240719-M211	0.30 ± 0.52
	<i>Clonostachys chloroleuca</i>	SFC20240719-M212	0.30 ± 0.52
Mature	<i>Nigrograna</i> sp. 2	SFC20240812-M184	0.60 ± 0.00
	<i>Nigrograna hydei</i>	SFC20240812-M185	0.60 ± 0.00
	<i>Nigrograna kunmingensis</i>	SFC20240812-M186	0.60 ± 0.00
	<i>Periconia</i> sp. 1	SFC20240812-M187	0.60 ± 0.00
	<i>Cladosporium marinisedimentum</i>	SFC20240812-M190	0.60 ± 0.00
	<i>Penicillium maximae</i>	SFC20240812-M199	0.60 ± 0.00
	<i>Neosetophoma</i> sp.1	SFC20240812-M213	0.60 ± 0.00
	<i>Neodidymella thailandica</i>	SFC20240812-M191	0.30 ± 0.52
	<i>Geotrichum candidum</i>	SFC20240812-M192	0.30 ± 0.52
	<i>Penicillium sumatraense</i>	SFC20240812-M196	0.30 ± 0.52
	<i>Trichoderma guizhouense</i>	SFC20240812-M168	0.30 ± 0.52
	<i>Trichoderma insigne</i>	SFC20240812-M175	0.30 ± 0.52
	<i>Fusarium acuminatum</i>	SFC20240812-M156	0.30 ± 0.52
	<i>Penicillium koreense</i>	SFC20240812-M181	0.30 ± 0.52
	<i>Paraconiothyrium cyclothyrioides</i>	SFC20240812-M188	0.30 ± 0.52
	<i>Curvularia</i> sp. 1	SFC20240812-M189	0.30 ± 0.52
	<i>Clonostachys linzhiensis</i>	SFC20240812-M193	0.30 ± 0.52
	<i>Penicillium sumatraense</i>	SFC20240812-M195	0.30 ± 0.52
	<i>Aspergillus fumigatus</i>	SFC20240812-M197	0.30 ± 0.52
	<i>Penicillium yuyongnianii</i>	SFC20240812-M198	0.30 ± 0.52
	<i>Aspergillus creber</i>	SFC20240812-M206	0.30 ± 0.52
	<i>Trichoderma</i> sp. 7	SFC20240812-M219	0.30 ± 0.52
	<i>Sporobolomyces carnicolor</i>	SFC20240812-M145	0.15 ± 0.64