

Supplementary Material

The Impact of *Marasmius tricolor 310b* on the Degradation of Cellulose in Rapeseed Straw Composting

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Table S1. The dissimilarity analysis between treatments.

Methods	MRPP		ANOSIM		PERMANOVA	
	Delta	P	R	P	F	P
Whole dataset	0.6222	0.001	0.1198	0.001	3.1233	0.001
ST VS. STM	0.6258	0.053	0.054	0.052	1.8671	0.052
ST VS. STPM	0.6052	0.001	0.2345	0.001	4.873	0.001
STPM VS. STPMM	0.6186	0.392	0.000050431	0.403	1.1583	0.297

Table S2. The network properties.

		ST	STM	STPM	STPMM
Emperical networks	Cutoff	0.76	0.76	0.76	0.76
	Total nodes	139	118	108	135
	Total links	433	254	562	715
	R square of power-law	0.929388	0.883238673	0.689666974	0.81108583
	Average degree (avgK)	6.230215827	4.305084746	10.40740741	10.59259259
	Average clustering coefficient (avgCC)	0.310677855	0.294409857	0.385025942	0.420263606
	Average path distance (GD)	3.314479638	4.257254902	3.763025512	3.482261775
	Connectedness (Con)	0.783442811	0.738809213	0.963309103	0.913101161
	Keystone numbers	15	2	5	2
Random networks	Modularity	0.492	0.615	0.308	0.39
	Average clustering coefficient (avgCC)	0.05 +/- 0.012	0.025 +/- 0.013	0.162 +/- 0.017	0.104 +/- 0.014
	Average path distance (GD)	2.912 +/- 0.046	3.318 +/- 0.069	2.45 +/- 0.044	2.482 +/- 0.033
	Connectedness (Con)	0.971 +/- 0.028	0.968 +/- 0.034	0.992 +/- 0.016	0.982 +/- 0.021
	Modularity (fast_greedy)	0.331 +/- 0.009	0.431 +/- 0.01	0.187 +/- 0.005	0.211 +/- 0.007

Table S3. Kernsoorten van het netwerk

		OTUID	No. module	Network role	Domain	Phylum	Class	Order	Family	Genus	Species
ST	1	OTU_322	5	Connector hubs	Fungi	Ascomycota	Unclassified	Unclassified	Unclassified	Unclassified	Unclassified
	2	OTU_110	6	Connector hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Leptosphaeriaceae	Unclassified	Unclassified
	3	OTU_187	4	Connector hubs	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pyrenomataceae	Unclassified	Unclassified
	4	OTU_149	5	Connector hubs	Fungi	Ascomycota	Dothideomycetes	Dothideomycetes Incertae sedis	Pseudeurotiaceae	Teberdinia	Unclassified
	5	OTU_377	3	Connector hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	Pyrenophora	Pyrenophora tritici-repentis
	6	OTU_567	4	Connector hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	Preussia	Preussia aemulans
	7	OTU_106	1	Connector hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	Preussia	Preussia aemulans
	8	OTU_55	4	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	Podospora	Podospora intestinaea
	9	OTU_73	6	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	Podospora	Podospora communis
	10	OTU_11	1	Module hubs	Fungi	Ascomycota	Sordariomycetes	Sordariomycetidae Incertae sedis	Plectosphaerellaceae	Plectosphaerella	Plectosphaerella cucumerina
	11	OTU_107	2	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	Gibberella	Fusarium torulosum
	12	OTU_42	4	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	Gibberella	Fusarium torulosum
	13	OTU_26	4	Module hubs	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	Gibberella	Fusarium tricinctum
	14	OTU_15	1	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	Fusarium	Fusarium domesticum
	15	OTU_1729	5	Connector hubs	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae	Chaetomium	Unclassified
STM	1	OTU_26	1	Module hubs	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	Gibberella	Fusarium tricinctum
	2	OTU_2995	3	Module hubs	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	Devriesia	Devriesia imbrexigena
STPM	1	OTU_79	5	Module hubs	Fungi	Unclassified	Unclassified	Unclassified	Unclassified	Unclassified	Unclassified
	2	OTU_227	2	Connector hubs	Fungi	Basidiomycota	Microbotryomycetes	Sporidiobolales	Sporidiobolales Incertae sedis	Sporobolomyces	Sporobolomyces coprosmae
	3	OTU_567	1	Module hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	Preussia	Preussia aemulans
	4	OTU_730	2	Module hubs	Fungi	Zygomycota	Mucoromycotina Incertae sedis	Mucorales	Mucoraceae	Mucor	Amylomyces rouxii
	5	OTU_19	1	Connector hubs	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Trichomaceae	Emericella	Emericella nidulans
STPMM	1	OTU_67	1	Module hubs	Fungi	Ascomycota	Sordariomycetes	Microascales	Microascaleae	Pseudallescheria	Pseudallescheria ellipsoidea
	2	OTU_567	1	Module hubs	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	Preussia	Preussia aemulans

Figure S1. The experimental site and sampling method.

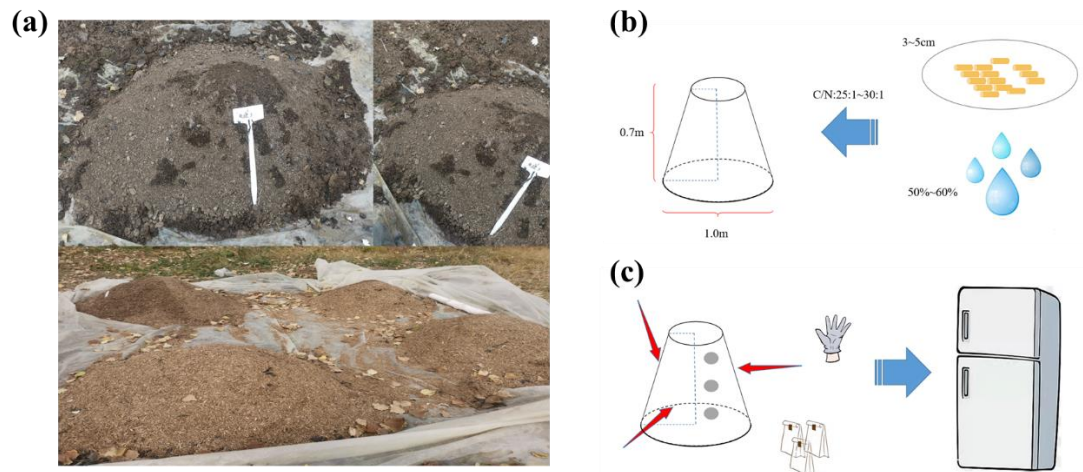


Figure S2. Changes in composting temperature

