agronomy

MDPI

Supplementary Materials

Table S1. Location and selected properties of the soils used in the experiment (WHC - water holding capacity)

Texture	IUSS WRB (location)	Sampling horizon depth (cm) and symbol	Geology	Particle size distribution %			pH H_2O	C_{org} g kg^{-1}	Bulk density g cm^{-3}	WHC g $100cm^{-3}$
				sand 2-0.05 mm	silt 0.05-0.002 mm	clay <0.002mm				
sand	Arenosol (Błędów Desert. Silesian Highlands)	50-70 C	Quaternary sands	99	0	1	4.9	0.25	1.63	32.3
loam	Cambisol (Wielickie Foothils)	55-70 C	Carpathians flysch	31	48	21	5.8	0.82	1.42	41.3
silty loam	Phaeozem (Kraków-Częstochowa Upland)	180-200 C	Loess	14	71	15	8.2	5.28	1.57	39.5
clay	Gleysoil (Kraków-Częstochowa Upland)	60-80 Cg	Miocene clays	4	29	67	8.0	6.01	1.40	49.4

Table S2. Carbon content in additives and their doses in the individual treatments

Additives	Organic carbon content	Doses
straw	435.9*	28.3*
peat	267.8*	91.1*
compost	183.3*	106.4*
compost$_{micro}$ Compost+ EmFarmaPlus preparation#	183.3*	106.1*
	11.0#	5§

Units: *- g kg^{-1}, # - g $1000ml^{-1}$, § - ml kg^{-1}

Table S3. The diameter of soil aggregates, earthworms' traces (ET) and the dissolved organic carbon to organic carbon ratio (DOC:C_{org}) (SD – standard deviation)

Texture	Additives	Aggregate diameter		ET		DOC:C_{org}	
		(mm)	SD	(%)	SD		SD
sand	control	no data	no data	1.87	0.72	9.09	1.02
	straw	1.48	no reps	41.00	7.02	7.00	0.31
	peat	1.38	0.10	11.55	8.75	0.90	0.42
	compost	1.63	0.09	46.53	14.62	1.91	0.65
	compost$_{micro}$	1.42	0.03	59.18	3.05	1.88	1.04
	mean	1.48	0.13	32.03	23.56	4.16	3.44

loam	control	1.68	0.03	6.79	8.06	3.57	0.55
	straw	1.56	0.10	42.68	7.61	1.98	0.58
	peat	1.66	0.11	14.07	4.76	0.66	0.17
	compost	1.70	0.14	24.99	7.46	0.74	0.10
	$compost_{micro}$	1.60	0.07	24.40	16.24	0.86	0.18
	mean	1.64	0.10	22.59	14.96	1.56	1.20
silty loam	control	1.68	0.03	8.19	2.26	3.57	0.55
	straw	1.50	0.04	32.38	7.43	1.98	0.58
	peat	1.64	0.08	38.56	8.14	0.66	0.17
	compost	1.71	0.09	11.91	6.03	0.74	0.10
	$compost_{micro}$	1.63	0.10	5.29	2.35	0.86	0.18
	mean	1.63	0.10	19.26	14.85	0.78	0.20
clay	control	1.46	0.07	10.04	2.83	0.80	0.04
	straw	1.41	0.06	20.57	4.88	0.72	0.08
	peat	1.51	0.11	15.88	2.30	0.40	0.03
	compost	1.58	0.05	17.81	3.67	0.59	0.06
	$compost_{micro}$	1.67	0.07	22.19	4.67	0.67	0.14
	mean	1.53	0.11	17.30	5.43	0.64	0.15
mean all aggregates		1.58	0.12	22.79	16.63	1.78	2.28