Supplementary materials

Effects of tebuconazole application on soil microbiota and enzymes

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Table S1. Effect of tebuconazole on population numbers of microorganisms, 10^n cfu kg^{-1} soil d.m.

Object	Organotrophic bacteria 10^{10} cfu	Actinobacteria 10^{10} cfu	Fungi 10^8 cfu
C	1.599±0.077^e	0.731±0.019^b	0.175±0.008^e
T1	1.670±0.006^d	0.987±0.011^a	0.327±0.006^d
T2	2.052±0.017^c	0.690±0.030^c	0.375±0.018^c
T3	2.242±0.018^b	0.630±0.027^{cd}	0.479±0.003^b
T4	2.575±0.024^a	0.630±0.028^{cd}	0.606±0.012^a
$\overline{x}$	2.028	0.734	0.392
r	0.936*	-0.617	0.912

Tebuconazole doses in mg kg^{-1}: C – control soil, T1 – 0.01 mg, T2 – 0.1 mg, T3 – 0.5 mg, T4 – 1.0 mg; r – simple Pearson's correlation coefficient significant at *p<0.05, n=20; $\overline{x}$ – arithmetic mean; ± – standard deviation. Homogeneous groups designated with the same letters (a-e) were calculated separately for each group of microorganisms.

Table S2. Values of Shannon-Wiener index and Simpson index computed based on all OTU data.

Object	Taxa				
	Phylum	**Class**	**Order**	**Family**	**Genus**
	Shannon-Wiener index				
C	1.718±0.006 b	2.419±0.007 b	2.928±0.005 b	3.025±0.006 c	1.835±0.012 a
T1	1.641±0.014 d	2.377±0.004 c	2.933±0.005 b	2.973±0.005 d	1.715±0.007 b
T2	1.802±0.004 a	2.552±0.008 a	3.012±0.007 a	3.063±0.006 b	1.825±0.006 a
T3	1.788±0.009 a	2.566±0.003 a	3.032±0.005 a	3.106±0.003 a	1.851±0.013 a
T4	1.690±0.007 c	2.419±0.006 b	2.902±0.006 c	3.034±0.008 c	1.828±0.011 a
$\overline{x}$	1.728	2.467	2.961	3.040	1.811
r	0.213	0.347	0.130	0.486	0.354
	Simpson index				
C	0.737±0.006 ab	0.688±0.006 bc	0.748±0.010 c	0.655±0.006 a	0.355±0.016 a
T1	0.710±0.008 b	0.661±0.010 c	0.798±0.007 a	0.610±0.006 b	0.263±0.009 c
T2	0.764±0.006 a	0.718±0.013 a	0.763±0.006 bc	0.628±0.010 ab	0.330±0.007 a
T3	0.757±0.004 a	0.716±0.009 a	0.794±0.007 ab	0.623±0.008 b	0.298±0.012 b
T4	0.731±0.009 ab	0.700±0.008 ab	0.764±0.006 bc	0.634±0.005 ab	0.347±0.008 a
$\overline{x}$	0.740	0.697	0.773	0.630	0.319
r	0.257	0.534	0.205	-0.277	0.079

Tebuconazole doses in mg kg^{-1}: C – control soil, T1 – 0.01 mg, T2 – 0.1 mg, T3 – 0.5 mg, T4 – 1.0 mg; *r* – simple Pearson's correlation coefficient significant at *$p<0.05$, n=20; $\overline{x}$ – arithmetic mean; ± – standard deviation. Homogeneous groups designated with the same letters (a-d) were calculated separately for each group of microorganisms.

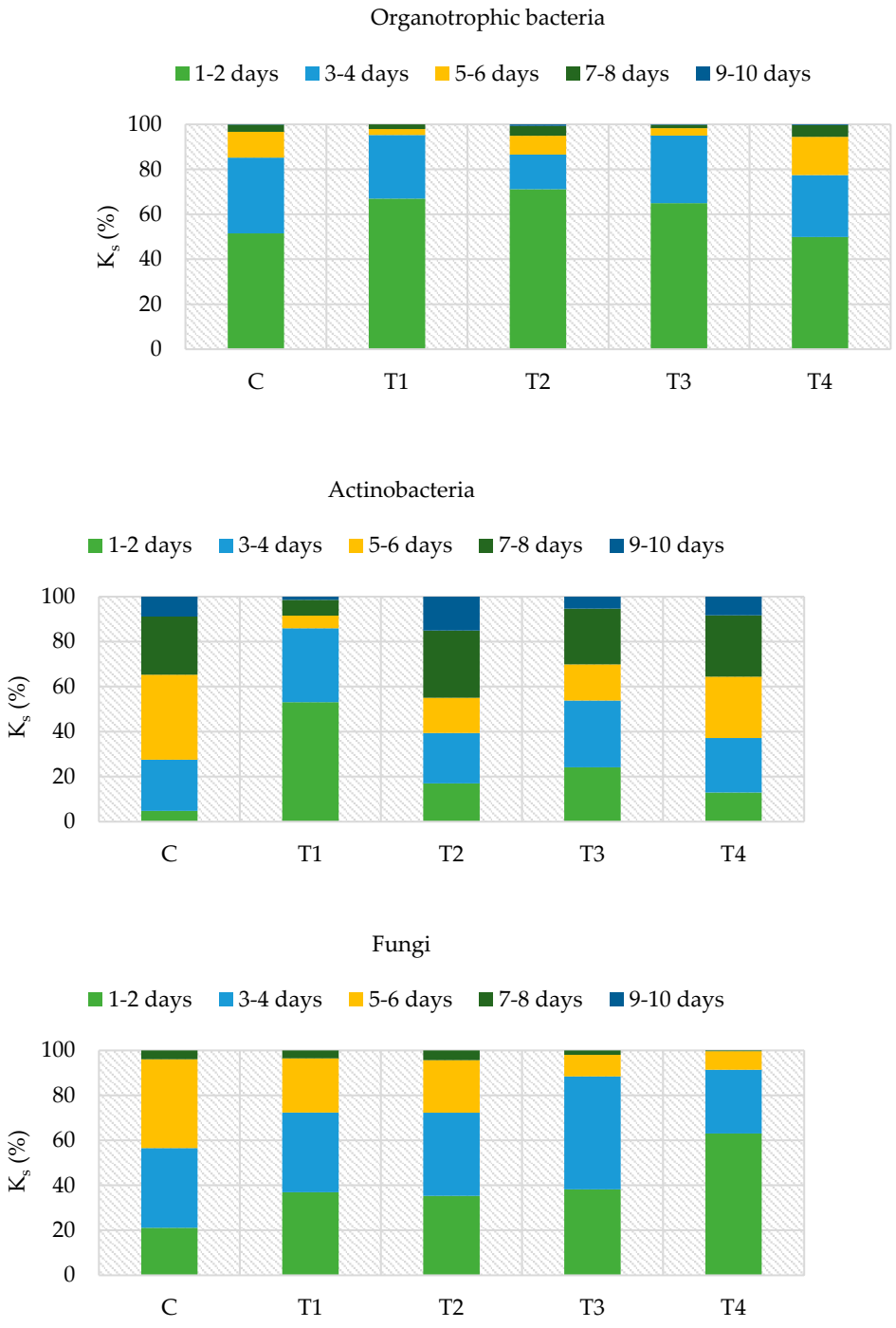

Figure S1. Increase in the abundance of microorganisms in various time intervals, in % (K_s). Tebuconazole doses in mg kg^{-1}: C – control soil, T1 – 0.01 mg, T2 – 0.1 mg, T3 – 0.5 mg, T4 – 1.0 mg.