



Sensitivity of *Zea mays* and soil microorganisms to the toxic effect of chromium (VI)

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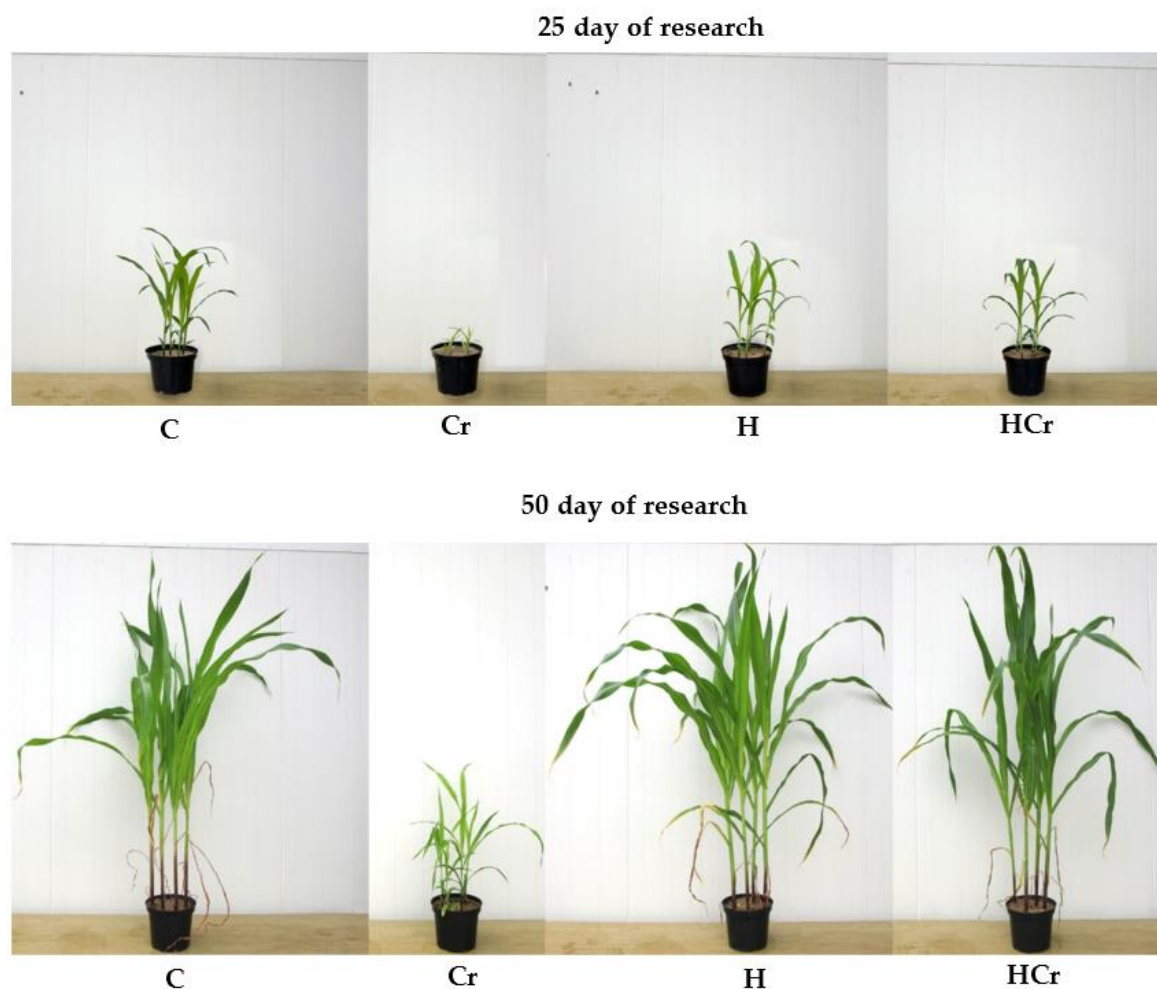


Figure S1. *Zea mays* in the 25th and 50th day of research

Table S1. The number of microorganisms, 10ⁿ cfu kg⁻¹ d.m. of soil

Dose of Cr(VI), mg kg ⁻¹ d.m. of soil	Soil use			
	Unsown		Sown with <i>Zea mays</i>	
	Analysis day			
	25	50	25	50
Organotrophic bacteria, 10 ⁹				
Control				
0	18.340 ^{de}	14.938 ^{ef}	35.496 ^b	34.559 ^b
60	7.148 ^{gh}	2.909 ^h	10.452 ^{fg}	19.966 ^d
HumiAgra (H)				
0	32.932 ^b	21.199 ^d	35.742 ^b	44.173 ^a
60	13.656 ^f	11.142 ^{fg}	14.445 ^{ef}	26.277 ^c
Actinomyces, 10 ⁹				
Control				
0	11.142 ^{hi}	19.326 ^{ef}	32.390 ^b	27.559 ^c
60	3.648 ^j	12.325 ^{gh}	17.255 ^f	13.952 ^g
HumiAgra				
0	22.382 ^d	32.193 ^b	36.482 ^a	32.932 ^b
60	9.022 ⁱ	13.508 ^{gh}	21.100 ^{de}	13.656 ^{gh}
Fungi, 10 ⁷				
Control				
0	15.776 ^g	19.326 ^{c-f}	17.452 ^{e-g}	21.692 ^{bc}
60	10.994 ⁱ	15.529 ^{gh}	11.684 ⁱ	16.565 ^{fg}
HumiAgra				
0	19.966 ^{c-e}	20.854 ^{b-d}	25.439 ^a	23.565 ^{ab}
60	12.473 ^{hi}	15.529 ^{gh}	18.290 ^{d-g}	19.473 ^{c-f}

Homogeneous groups within each microbial group are marked with identical letters (a-j).

Table S2. Colony Development Index (CD) of microorganisms

Dose of Cr(VI), mg kg ⁻¹ d.m. of soil	Soil use			
	Unsown		Sown with <i>Zea mays</i>	
	Analysis day			
	25	50	25	50
Organotrophic bacteria, 10 ⁹				
	Control			
0	29.522 ^{a-c}	27.727 ^{a-d}	29.291 ^{a-c}	28.448 ^{a-d}
60	31.096 ^{ab}	26.742 ^{b-d}	27.016 ^{b-d}	28.281 ^{a-d}
HumiAgra				
0	31.434 ^a	31.788 ^a	31.488 ^a	29.638 ^{a-c}
60	24.767 ^d	26.387 ^{cd}	25.808 ^{cd}	28.321 ^{a-d}
Actinomyces, 10 ⁹				
	Control			
0	26.555 ^{bc}	20.448 ^{f-h}	20.731 ^{f-h}	30.156 ^a
60	24.535 ^{c-e}	17.899 ^{hi}	19.109 ^{g-i}	24.756 ^{b-d}
HumiAgra				
0	27.618 ^{ab}	20.998 ^{fg}	22.697 ^{d-f}	21.232 ^{fg}
60	17.320 ⁱ	21.534 ^{e-g}	19.118 ^{g-i}	19.980 ^{f-i}
Fungi, 10 ⁷				
	Control			
0	27.726 ⁱ	30.735 ⁱ	30.991 ^{hi}	33.018 ^{fg}
60	33.974 ^{d-f}	36.871 ^b	34.906 ^{c-e}	37.056 ^b
HumiAgra				
0	30.311 ⁱ	35.198 ^{b-d}	31.930 ^{g-i}	33.096 ^{e-g}
60	32.811 ^{f-h}	39.014 ^a	39.007 ^a	35.851 ^{bc}

Homogeneous groups within each microbial group are marked with identical letters (a-j).

Table S3. Index of the ecophysiological diversity (EP) of microorganisms

Dose of Cr(VI), mg kg ⁻¹ d.m. of soil	Soil use			
	Unsown		Sown with <i>Zea mays</i>	
	Analysis day			
	25	50	25	50
Organotrophic bacteria, 10 ⁹				
Control				
0	0.837 ^{b-d}	0.776 ^d	0.887 ^{a-c}	0.833 ^{b-d}
60	0.839 ^{b-d}	0.892 ^{ab}	0.880 ^{bc}	0.827 ^{cd}
HumiAgra (H)				
0	0.854 ^{bc}	0.858 ^{bc}	0.893 ^{ab}	0.699 ^e
60	0.872 ^{bc}	0.842 ^{bc}	0.947 ^a	0.876 ^{bc}
Actinomyces, 10 ⁹				
Control				
0	0.777 ^{cd}	0.865 ^{ab}	0.810 ^{b-d}	0.816 ^{b-d}
60	0.677 ^e	0.885 ^{ab}	0.761 ^{cd}	0.886 ^{ab}
HumiAgra				
0	0.753 ^{de}	0.901 ^a	0.893 ^{ab}	0.908 ^a
60	0.592 ^f	0.873 ^{ab}	0.841 ^{a-c}	0.753 ^{de}
Fungi, 10 ⁷				
Control				
0	0.736 ^{ab}	0.614 ^g	0.708 ^{bc}	0.673 ^{d-f}
60	0.649 ^{e-g}	0.597 ^{gh}	0.626 ^{fg}	0.546 ^{hi}
HumiAgra				
0	0.705 ^{b-d}	0.609 ^g	0.705 ^{b-d}	0.783 ^a
60	0.601 ^{gh}	0.530 ⁱ	0.509 ⁱ	0.625 ^{fg}

Homogeneous groups within each microbial group are marked with identical letters (a-i).