

Figure S1. Leaves quantity changes occurring in *M. x giganteus* grown in soil differently contaminated by diesel with amendments. Asterisks denote the significant difference between compared pairs (* - $p < 0.05$; ** - $p < 0.01$; *** - $p < 0.001$).

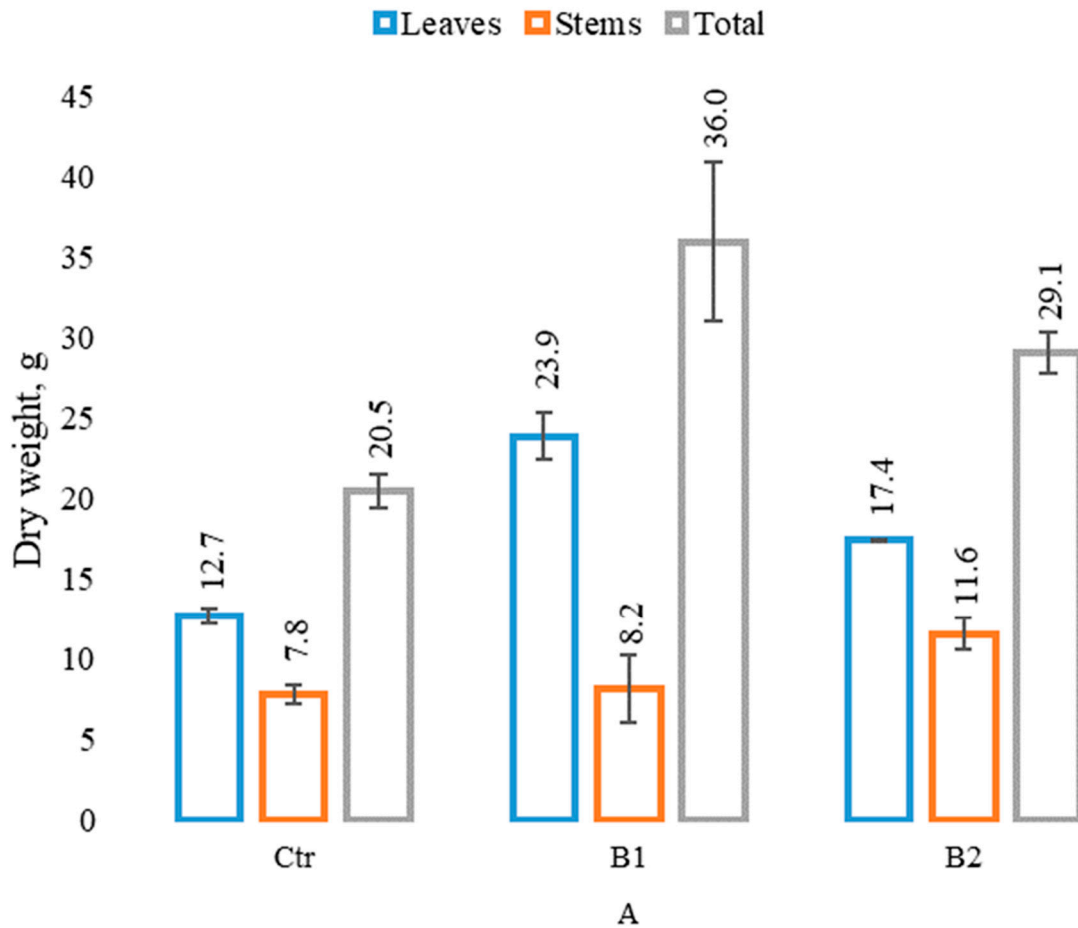


Figure S2. Aboveground biomass dry weight of *M. x giganteus* grown in uncontaminated soil with the presence of different amendments.

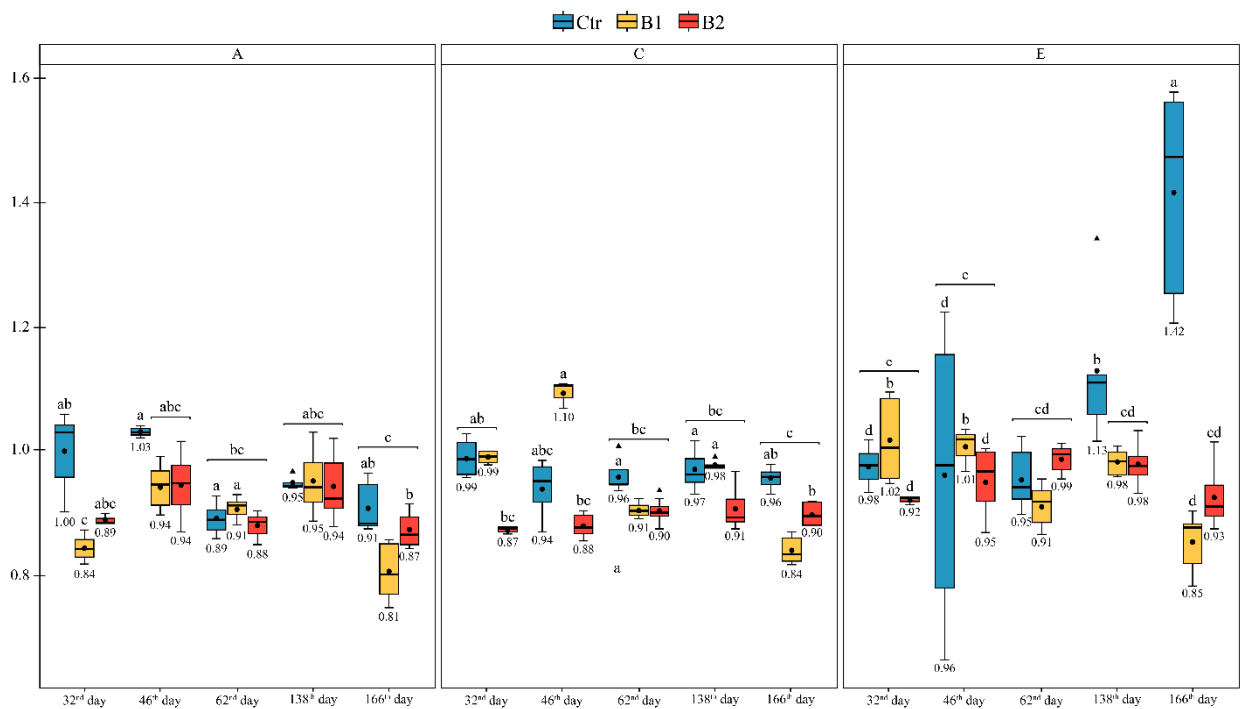


Figure S3. *M. x giganteus* NPQt photometric parameters changes during one vegetation.

Table S1. *M. × giganteus* height increasing (in percentages) while growing in soil with biochars (B1 and B2).

Month	Contamination	C	B1	B2
May	A	100.0	133.2	176.7
	B	100.0	175.0	110.4
	C	100.0	89.6	118.1
	D	100.0	153.9	200.9
	E	100.0	269.2	302.6
June	A	100.0	71.3	115.8
	B	100.0	111.9	94.9
	C	100.0	94.1	117.5
	D	100.0	80.1	114.0
	E	100.0	128.0	120.5
August	A	100.0	105.1	124.0
	B	100.0	90.3	77.8
	C	100.0	80.5	108.8
	D	100.0	91.2	103.2
	E	100.0	130.4	143.1
September	A	100.0	105.1	124.0
	B	100.0	90.3	77.8
	C	100.0	81.2	109.9
	D	100.0	91.2	103.2
	E	100.0	130.4	143.1

Table S2. MANOVA test results for processing soil parameters changes (T – treatment; ID – presence or absence of *M. × giganteus*; M – the month of measurements; ges – generalized eta squared).

Parameter	<i>p</i> value						
	T	ID	M	T ~ ID	T ~ M	ID ~ M	T ~ ID ~ M
pH (KCl)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
NO ₃	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
NH ₄	< 0.001	< 0.001	< 0.001	0.16	< 0.001	< 0.001	0.13
P ₂ O ₅	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
K	< 0.001	< 0.001	< 0.001	0.63	0.91	< 0.001	0.88
<i>ges</i>							
pH (KCl)	0.98	0.63	0.91	0.82	0.93	0.84	0.86
NO ₃	0.98	0.94	0.97	0.75	0.92	0.90	0.74
NH ₄	0.89	0.45	0.91	0.10	0.52	0.62	0.18
P ₂ O ₅	0.96	0.44	0.93	0.73	0.95	0.82	0.59
K	0.52	0.76	0.34	0.03	0.03	0.66	0.03

Table S3. MANOVA test results for processing *M. × giganteus* physiological parameters changes (T – treatment; M – the month of measurements; C – contamination level; ges – generalized eta squared; DW – dry weight).

Parameter	<i>p</i> value						
	T	C	M	T ~ C	T ~ M	C ~ M	T ~ C ~ M
Height	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.74	< 0.001
Leaves quantity	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Leaves DW	< 0.001	< 0.001	-	< 0.001	-	-	-
Stems DW	< 0.001	< 0.001	-	< 0.01	-	-	-
Plant area	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
NPQ _t	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SPAD	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>ges</i>							
Height	0.56	0.81	0.95	0.77	0.43	0.08	0.49
Leaves quantity	0.39	0.55	0.98	0.14	0.43	0.42	0.25
Leaves DW	0.88	0.91	-	0.78	-	-	-
Stems DW	0.79	0.94	-	0.65	-	-	-
Plant area	0.62	0.54	0.99	0.50	0.70	0.64	0.59
NPQ _t	0.37	0.35	0.14	0.22	0.41	0.22	0.47
SPAD	0.66	0.73	0.58	0.18	0.66	0.30	0.48