

## Supplementary material

Table 1. Measured values of biomass yield ( $\text{g/m}^2$ ) of dry matter and their mean values with standard deviation ( $n = 3$ ). Measured values were recalculated from the harvested area ( $0,7 \text{ m}^2$ ) to the whole  $1 \text{ m}^2$  plots.

Name of plot	I. harvest		II. harvest		Sum of harvests
	( $\text{g/m}^2$ )	mean $\pm$ sd ( $\text{g/m}^2$ )	( $\text{g/m}^2$ )	mean $\pm$ sd ( $\text{g/m}^2$ )	mean $\pm$ sd ( $\text{g/m}^2$ )
<b>1 control</b>	644,00		15,21		
<b>2 control</b>	480,34	530,17 $\pm$ 98,83	35,76	37,06 $\pm$ 22,53	567,23 $\pm$ 79,82
<b>3 control</b>	466,17		60,21		
<b>1 WBC</b>	525,29		43,44		
<b>2 WBC</b>	483,60	481,09 $\pm$ 45,52	38,97	39,50 $\pm$ 3,58	520,68 $\pm$ 49,03
<b>3 WBC</b>	434,36		36,37		
<b>1 SSBC</b>	478,84		9,29		
<b>2 SSBC</b>	408,51	435,25 $\pm$ 38,08	64,53	42,26 $\pm$ 29,14	477,51 $\pm$ 9,23
<b>3 SSBC</b>	418,39		52,97		
total yield (g)		4339,50		356,76	4696,26
% of total		92,40		7,60	100,00

Table 2. Mean biomass C content in each treatment group with standard deviation ( $n = 9$ ). The total C content in yield ( $\text{g/m}^2$ ) is calculated from the average biomass yields ( $\text{g/m}^2$ ) (Tab. 1. in Supplementary material) multiplied by corresponding mean values of biomass C (%).

Name of treatment	I. harvest		II. harvest	
	Biomass C (%)	Total C in yield ( $\text{g/m}^2$ )	Biomass C (%)	Total C in yield ( $\text{g/m}^2$ )
<b>Control</b>	40,71 $\pm$ 0,45	215,84 $\pm$ 40,31	41,32 $\pm$ 0,26	15,31 $\pm$ 9,31
<b>WBC</b>	40,03 $\pm$ 0,32	192,59 $\pm$ 18,28	41,14 $\pm$ 0,19	16,29 $\pm$ 1,47
<b>SSBC</b>	40,27 $\pm$ 0,09	175,28 $\pm$ 15,34	41,64 $\pm$ 0,42	17,60 $\pm$ 12,14

Table 3. Values of initial ( $T_0$ ) C content in cultivated mass of soil, and C content added in soil amendments (WBC, SSBC), shown as mean values (%) with standard deviation ( $n = 2$ ).

	Control (%)	WBC (%)	SSBC (%)
<b>C<sub>TOT</sub></b>	2,14 $\pm$ 0,15	1,99 $\pm$ 0,12	2,19 $\pm$ 0,43
<b>C<sub>TOT BC</sub></b>	-	0,59 $\pm$ 0,00	0,56 $\pm$ 0,05
<b><math>\Sigma</math></b>	2,14 $\pm$ 0,15	2,58 $\pm$ 0,13	2,75 $\pm$ 0,43
<b>Cox</b>	1,18 $\pm$ 0,05	1,14 $\pm$ 0,05	0,88 $\pm$ 0,03
<b>Cox BC</b>	-	0,05 $\pm$ 0,00	0,14 $\pm$ 0,00
<b><math>\Sigma</math></b>	1,18 $\pm$ 0,05	1,19 $\pm$ 0,05	1,03 $\pm$ 0,03

Table 4. Values of initial (T0) C content in cultivated mass of soil, and C content added in soil amendments (WBC, SSBC), shown as mean values (g/m<sup>2</sup>) with standard deviation (n = 2).

	<b>Control</b> (g/m <sup>2</sup> )	<b>WBC</b> (g/m <sup>2</sup> )	<b>SSBC</b> (g/m <sup>2</sup> )
<b>C<sub>TOT</sub></b>	5662,02 ± 393,80	5264,22 ± 318,79	5794,62 ± 1143,90
<b>C<sub>TOT BC</sub></b>	-	1576,54 ± 4,18	1491,04 ± 140,27
<b>Σ</b>	5662,02 ± 393,80	6840,76 ± 318,82	7285,66 ± 1152,47
<b>Cox</b>	3117,80 ± 139,35	3021,84 ± 121,78	2346,45 ± 69,14
<b>Cox BC</b>	-	126,84 ± 0,49	378,13 ± 2,95
<b>Σ</b>	3117,80 ± 139,35	3148,68 ± 121,78	2724,58 ± 69,20

Table 5. Values of C content in cultivated mass of soil measured after the vegetation season (at T1), shown as mean values with standard deviation (n = 2).

	<b>Grassland</b>			
	<b>C<sub>TOT</sub></b>		<b>Cox</b>	
	(g/m <sup>2</sup> )	(%)	(g/m <sup>2</sup> )	(%)
<b>Control</b>	5803,46 ± 576,26	2,19 ± 0,22	3211,81 ± 939,82	1,21 ± 0,35
<b>WBC</b>	7293,00 ± 317,35	2,75 ± 0,12	3940,05 ± 500,50	1,49 ± 0,19
<b>SSBC</b>	7107,36 ± 511,77	2,68 ± 0,19	3665,73 ± 266,55	1,38 ± 0,10
	<b>Fallow</b>			
	<b>C<sub>TOT</sub></b>		<b>Cox</b>	
	(g/m <sup>2</sup> )	(%)	(g/m <sup>2</sup> )	(%)
<b>Control</b>	5476,38 ± 506,38	2,07 ± 0,19	3874,61 ± 477,27	1,46 ± 0,18
<b>WBC</b>	7315,10 ± 606,94	2,76 ± 0,23	4159,22 ± 338,05	1,57 ± 0,13
<b>SSBC</b>	7381,40 ± 895,68	2,78 ± 0,34	5563,95 ± 386,73	2,10 ± 0,15