

## 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	<b>I. harvest</b>		<b>II. harvest</b>		<b>Sum of harvests</b>
	( $\text{g/m}^2$ )	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	<b>I. harvest</b>		<b>II. harvest</b>	
	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 (T0) C content in cultivated mass of soil, and C content added in soil amendments (WBC, SSBC), shown as mean values (%) with standard deviation ( $n = 2$ ).

	<b>Control (%)</b>	<b>WBC (%)</b>	<b>SSBC (%)</b>
<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 ( $\text{g/m}^2$ ) with standard deviation ( $n = 2$ ).

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

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