

## Supplementary Materials

### Clover species specific influence on microbial abundance and associated enzyme activities in rhizosphere and non-rhizosphere soils

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**Table. S1** Monthly recorded rainfalls and average temperature on Troubsko locality during the year 2020

Total rainfalls [mm]	Year		Average temperature [°C]	Year	
Month	2020	1981-2010	Month	2020	1981-2010
1	8.5	25	1	-0.2	-1.7
2	27.1	23.9	2	4.6	-0.3
3	25.7	31.5	3	5.3	3.8
4	20.3	32	4	9.9	9.5
5	65.4	60.5	5	12.6	14.6
6	87.2	68.7	6	18	17.4
7	59	71.6	7	19.2	19.5
8	105.9	63.7	8	20.6	18.8
9	81.6	48.2	9	15	14.1
10	130.1	32.1	10	10.1	8.8
11	23.4	36.4	11	4.51	3.5
12	36.8	32	12	2.4	-0.6
Whole year sum	671	525.6	Year	9	8.95
Vegetation period	419.4	344.7	Vegetation period	15.88	15.65

Vegetation period: 1. 4.–30. 9.; source of data for long-period 30-year average values (1981–2010): Czech Hydrometeorological Institute.

**Table. S2** Results of two-way analysis of variance ANOVA

<b>Response: ARS</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	178.49	44.62	176.92	< 0.001 ***
Sampling place	1	309.55	309.55	1227.30	< 0.001 ***
Plant to Sampling place	4	205.41	51.35	203.61	< 0.001 ***
Residuals	80	20.177	0.252		
<b>Response: Ure</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	235.27	58.82	72.52	< 0.001 ***
Sampling place	1	634.75	634.75	782.61	< 0.001 ***
Plant to Sampling place	4	279.35	69.84	86.11	< 0.001 ***
Residuals	80	64.89	0.81		
<b>Response: Phos</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	9154	2289	36.239	< 0.001 ***
Sampling place	1	56974	56974	299.33	< 0.001 ***
Plant to Sampling place	4	12214	3031	47.995	< 0.001 ***
Residuals	80	5052	63		
<b>Response: NAG</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	384.18	96.04	57.956	< 0.001 ***
Sampling place	1	1811.46	1811.46	1093.079	< 0.001 ***
Plant to Sampling place	4	482.25	120.56	72.751	< 0.001 ***
Residuals	80	132.58	1.66		
<b>Response: Glu</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	4321.7	1080.4	56.611	< 0.001 ***
Sampling place	1	18218.8	18218.8	954.628	< 0.001 ***
Plant to Sampling place	4	6598.1	1649.5	86.431	< 0.001 ***
Residuals	80	1526.8	19.1		
<b>Response: 16S rDNA</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	1.8602·10 <sup>23</sup>	4.6505·10 <sup>22</sup>	145.764	< 0.001 ***
Sampling place	1	1.5088·10 <sup>23</sup>	1.5088·10 <sup>23</sup>	472.918	< 0.001 ***
Plant to Sampling place	4	1.0452·10 <sup>23</sup>	2.6131·10 <sup>22</sup>	81.904	< 0.001 ***
Residuals	80	2.5524·10 <sup>22</sup>	3.1905·10 <sup>20</sup>		
<b>Response: 18S rDNA</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	4.0461·10 <sup>15</sup>	1.0115·10 <sup>15</sup>	202.632	< 0.001 ***
Sampling place	1	3.0200·10 <sup>15</sup>	3.0200·10 <sup>15</sup>	604.97	< 0.001 ***
Plant to Sampling place	4	1.8574·10 <sup>15</sup>	4.6436·10 <sup>14</sup>	93.023	< 0.001 ***
Residuals	80	3.9935·10 <sup>14</sup>	4.9919·10 <sup>12</sup>		
<b>Response: nirS</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>

Plant	4	$5.4667 \cdot 10^{13}$	$1.3667 \cdot 10^{13}$	176.451	< 0.001 ***
Sampling place	1	$1.8261 \cdot 10^{13}$	$1.8261 \cdot 10^{13}$	235.773	< 0.001 ***
Plant to Sampling place	4	$1.5121 \cdot 10^{13}$	$3.7804 \cdot 10^{12}$	48.808	< 0.001 ***
Residuals	80	$6.1962 \cdot 10^{12}$	$7.7453 \cdot 10^{10}$		

<b>Response: ALPS</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	$1.2259 \cdot 10^{14}$	$3.0649 \cdot 10^{13}$	166.88	< 0.001 ***
Sampling place	1	$1.9729 \cdot 10^{14}$	$1.9729 \cdot 10^{14}$	1074.23	< 0.001 ***
Plant to Sampling place	4	$1.3878 \cdot 10^{14}$	$3.4695 \cdot 10^{13}$	188.91	< 0.001 ***
Residuals	80	$1.4693 \cdot 10^{13}$	$1.8366 \cdot 10^{11}$		

<b>Response: AOB</b>	<b>Df</b>	<b>Sum Sq</b>	<b>Mean Sq</b>	<b>F value</b>	<b>p (&gt;F)</b>
Plant	4	$1.8040 \cdot 10^{13}$	$4.51 \cdot 10^{12}$	381.32	< 0.001 ***
Sampling place	1	$1.7023 \cdot 10^{13}$	$1.7023 \cdot 10^{13}$	1439.27	< 0.001 ***
Plant to Sampling place	4	$2.576 \cdot 10^{13}$	$6.4399 \cdot 10^{12}$	544.49	< 0.001 ***
Residuals	80	$9.4619 \cdot 10^{11}$	$1.1827 \cdot 10^{10}$		