

Effect of Clover Sward Management on Nitrogen Fixation and Performance of Following Spring- and Winter Wheat Crops; Results of a 3-Year Pilot Study

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Supplementary Figure S1. Location of Gilchester Farm in Northern Britain

Supplementary Table S1. Effect of soil depth at which soil samples were taken, *Rhizobium* inoculation of clover seed and greenwaste compost application on total nitrogen (N), nitrate (NO₃⁻), ammonium (NH₄⁺) and total plant available N (NO₃⁻ + NH₄⁺) concentrations in soils in October 2005.

Factors	Total soil N (%)	NO₃⁻ (mg/kg)	NH₄⁺ (mg/kg)	Total available N (mg/kg)
Soil depth (cm)				
0-30	0.26 ±0.01 a	7.9 ±1.9	10.2 ±3.2	18.1 ±4.2
30-60	0.18 ±0.01 b	3.0 ±0.8	7.6 ±1.7	10.6 ±2.1
60-90	0.14 ±0.01 c	2.6 ±0.6	5.4 ±1.2	8.0 ±1.4
<i>Rhizobium</i> seed inoculation				
with	0.19 ±0.01	4.3 ±0.9	9.7 ±2.8	13.9 ±2.8
without	0.19 ±0.01	5.6 ±1.4	5.5 ±0.9	10.3 ±1.5
Greenwaste compost application				
with	0.19 ±0.01	5.8 ±1.3	8.9 ±2.5	14.2 ±4.0
without	0.20 ±0.01	4.0 ±0.7	6.7 ±1.0	10.5 ±1.2
3-factor ANOVA results (p-values)				
<i>Main effects</i>				
Soil Depth	0.0004	ns	ns	ns
<i>Rhizobium</i> seed inoculation	ns	ns	ns	ns
Greenwaste compost application	ns	ns	ns	ns
<i>Interactions</i>	3-factor ANOVA detected no significant interactions			
Means labelled with the same letter within the same column are not significantly different (Tukey's honestly significant difference test, $p < 0.05$)				

Supplementary Table S2. Effect of soil depth, *Rhizobium* inoculation of clover seed and greenwaste compost application on total carbon (C), phosphorus (P) and potassium (K) concentrations in soils in in October 2005.

Soil depth	Soil C %	Soil P mg kg ⁻¹	Soil K mg kg ⁻¹
Soil depth (cm)			
0-30	2.5 ±0.1 a	22.3 ±0.9 a	66 ±3 a
30-60	1.7 ±0.1 b	9.7 ±1.0 b	47 ±3 b
60-90	1.3 ±0.2 c	4.7 ±0.7 c	42 ±4 b
<i>Rhizobium</i> seed inoculation			
with	1.9 ±0.1	12.7 ±1.4	47 ±3
without	1.7 ±0.1	11.7 ±0.7	52 ±3
Greenwaste compost application			
with	1.7 ±0.1	12.3 ±1.1	48 ±3
without	1.9 ±0.1	12.0 ±1.2	52 ±4
3-factor ANOVA results (p-values)			
<i>Main effects</i>			
Soil Depth	0.0017	0.0001	0.0027
<i>Rhizobium</i> seed inoculation	ns	ns	ns
Greenwaste compost application	ns	ns	ns
<i>Interactions</i>	3-factor ANOVA detected no significant interactions		
Means labelled with the same letter within the same column are not significantly different (Tukey's honestly significant difference test, $p < 0.05$)			