

## Supporting Information:

Mousavi, H.; Cottis, T.; Hoff, G.; Solberg, S.Ø. Nitrogen Enriched Organic Fertilizer (NEO) and its Effect on Ryegrass Yield and Soil Fauna Feeding Activity under Controlled Conditions.

**Table S1.** Effects of different fertilizing regimes including different amounts of mineral fertilizer, three types of NEO, organic fertilizer (untreated cattle slurry), organic fertilizer + different amounts of mineral fertilizer (MF), and no fertilizer on ryegrass dry matter yields (g) in trial one, and trial two, soil fauna feeding activity (%) in the early effects in trial one, and trial two, and in the late effects in trial one, and the depth of feeding activity (%) in the short term in trial one, and trial two, and in long term trial one, respectively. Games-Howell pairwise comparison method at 95% confidence interval is used to compare the differences between means. Means that do not share a letter are significantly different.

Ryegrass dry matter yields in trial one	Yield (g)	Grouping
Mineral fertilizer 235 kg N ha-1	16.9	A
Mineral fertilizer 175 kg N ha-1	14.9	AB
NEO type B 175.4 kg N ha-1	14.2	AB
NEO type C 175.4 kg N ha-1	14.1	AB
Mineral fertilizer 205 kg N ha-1	14	AB
Organic fertilizer + MF 175 kg N ha-1	13.4	AB
Organic fertilizer + MF 205 kg N ha-1	13.3	AB
NEO type A 175.4 kg N ha-1	13.1	AB
Mineral fertilizer 145 kg N ha-1	12.8	AB
Organic fertilizer + MF 145 kg N ha-1	12.7	AB
Organic fertilizer + MF 115 kg N ha-1	11.9	B
Mineral fertilizer 115 kg N ha-1	11.6	B
Organic fertilizer 73 kg N ha-1	9.1	B
No fertilizer	3.2	C
Ryegrass dry matter yields in trial two	Yield (g)	Grouping
Mineral fertilizer 175 kg N ha-1	14.1	A
Mineral fertilizer 155 kg N ha-1	13.8	A
NEO type A 175.4 kg N ha-1	13.4	A
NEO type C 175.4 kg N ha-1	13.2	A
Mineral fertilizer 135 kg N ha-1	13.1	A
Mineral fertilizer 115 kg N ha-1	12.4	A
NEO type B 175.4 kg N ha-1	11.9	AB
Mineral fertilizer 80 kg N ha-1	10.6	B

Organic fertilizer 73 kg N ha-1	10.3	BC
Mineral fertilizer 60 kg N ha-1	9.1	C
No fertilizer	2.7	D
<b>Soil fauna feeding activity, early effects in trial one</b>	<b>Feeding activity (%)</b>	<b>Grouping</b>
Mineral fertilizer 205 kg N ha-1	48.4	A
Mineral fertilizer 175 kg N ha-1	46	AB
No fertilizer	40.6	AB
Organic fertilizer 73 kg N ha-1	39.1	AB
Organic fertilizer + MF 205 kg N ha-1	37.2	AB
Organic fertilizer + MF 145 kg N ha-1	34.6	AB
Mineral fertilizer 145 kg N ha-1	33.1	AB
Organic fertilizer + MF 115 kg N ha-1	32.2	AB
Mineral fertilizer 235 kg N ha-1	28.1	AB
Organic fertilizer + MF 175 kg N ha-1	25.2	AB
NEO type A 175.4 kg N ha-1	22.6	AB
Mineral fertilizer 115 kg N ha-1	21.6	B
NEO type B 175.4 kg N ha-1	20.3	B
NEO type C 175.4 kg N ha-1	19.2	B
<b>Soil fauna feeding activity, early effects in trial two</b>	<b>Feeding activity (%)</b>	<b>Grouping</b>
No fertilizer	48.7	A
Mineral fertilizer 60 kg N ha-1	48.7	A
NEO type B 175 kg N ha-1	46.3	A
NEO type A 175 kg N ha-1	42.7	AB
Mineral fertilizer 80 kg N ha-1	41.9	AB
Mineral fertilizer 135 kg N ha-1	40.1	AB
NEO type C 175 kg N ha-1	38.8	AB
Organic fertilizer 73 kg N ha-1	37.5	AB
Mineral fertilizer 115 kg N ha-1	36.7	AB
Mineral fertilizer 155 kg N ha-1	26.8	AB
Mineral fertilizer 175 kg N ha-1	13.8	B
<b>Soil fauna feeding activity, late effects in trial one</b>	<b>Feeding activity (%)</b>	<b>Grouping</b>

Mineral fertilizer 205 kg N ha-1	69.7	A
Mineral fertilizer 175 kg N ha-1	69	AB
No fertilizer	68.7	ABC
Mineral fertilizer 145 kg N ha-1	59.9	ABCD
Mineral fertilizer 115 kg N ha-1	55.4	ABCD
Mineral fertilizer 235 kg N ha-1	53.1	ABCD
NEO type C 175.4 kg N ha-1	42.1	BCD
NEO type B 175.4 kg N ha-1	41.9	BCD
Organic fertilizer + MF 115 kg N ha-1	41.4	BCD
Organic fertilizer + MF 175 kg N ha-1	41.4	BCD
Organic fertilizer 73 kg N ha-1	36.7	CD
Organic fertilizer + MF 145 kg N ha-1	35.9	CD
NEO type A 175.4 kg N ha-1	34.3	D
Organic fertilizer + MF 205 kg N ha-1	30.1	D
<b>Depth of feeding activity, early effects in trial one</b>	<b>Feeding activity (%)</b>	<b>Grouping</b>
8 cm	43	A
6.5 cm	39	AB
7.5 cm	37	ABC
7 cm	36	ABC
5.5 cm	35	ABC
6 cm	32	ABC
0.5 cm	31	ABC
1 cm	31	ABC
3 cm	30	ABC
1.5 cm	30	ABC
5 cm	29	ABC
3.5 cm	29	ABC
2.5 cm	29	ABC
4 cm	26	BC
4.5 cm	25	BC
2 cm	23	C

Depth of feeding activity, early effects in trial two	Feeding activity (%)	Grouping
5.5 cm	43	A
7 cm	42	A
4.5 cm	42	A
6 cm	41	A
8 cm	41	A
6.5 cm	41	A
4 cm	40	A
5 cm	39	A
7.5 cm	38	A
0.5 cm	38	A
3.5 cm	37	A
3 cm	37	A
2.5 cm	36	A
1 cm	36	A
2 cm	28	A
1.5 cm	28	A
Depth of feeding activity, late effects in trial one	Feeding activity (%)	Grouping
7 cm	55	A
8 cm	53	A
6.5 cm	53	A
7.5 cm	51	A
6 cm	51	A
2.5 cm	48	A
5 cm	48	A
3.5 cm	48	A
4.5 cm	47	A
1 cm	47	A
5.5 cm	46	A
1.5 cm	46	A
0.5 cm	45	A

3 cm	45	A
2 cm	44	A
4 cm	43	A