

The Park Grass Experiment

Plot layout and current treatments

Plot treatments
(per hectare per year unless indicated)

Nitrogen (applied in spring)

N1, N2, N3: ammonium sulphate supplying
48, 96, 144 kg N and 55, 110, 165 kg S

N*1, N*2: sodium nitrate supplying
48, 96 kg N and 78, 157 kg Na

(N2), (N*2): last applied 1989

Minerals (applied in winter)

P: triple superphosphate supplying 35 kg P

K: potassium sulphate supplying 225 kg K
and 99 kg S

Na: sodium sulphate supplying 15 kg Na
and 10 kg S

Mg: magnesium sulphate (Epsom salts)
supplying 10 kg Mg and 13 kg S

Si: water soluble sodium silicate supplying
135 kg Si and 63 kg Na

Plot 20: rates of fertilizer in years when FYM
is not applied; 30 kg N*, 15 kg P, 45 kg K

Organics (applied every 4th year)

FYM: 35 t farmyard manure supplying
c. 240 kg N, 45 kg P, 350 kg K,
25 kg Na, 25 kg Mg, 40 kg S, 135 kg Ca

PM: Pelleted poultry manure (replaced
fishmeal in 2003) supplying c. 65 kg N

On plot 13/2 FYM and PM (previously fishmeal)
are applied in a 4-year cycle *ie*:
FYM in 2005, 2001, 1997, 1993 *etc*
PM in 2003, fishmeal in 1999, 1995, 1991 *etc*

(FYM/Fishmeal): FYM and fishmeal last applied
in 1993 and 1995 respectively.

Lime

Sub-plots a, b and c: differential amounts of
chalk applied, *if needed*, every three years to
maintain soil pH 7, 6 and 5, respectively

Sub-plot d receives no chalk

Plots 1-13 started in 1856, plots 14-17 in 1858,
plot 18 in 1865 and plots 19 and 20 in 1872.

Sub-plots range in size from 75 - 634 m²

