

Supplementary material for

Biochemical effects of banding limit the benefits of nitrification inhibition and controlled-release technology in the fertosphere of high N-input systems

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Graphs not included in the manuscript are shown here. In addition, some graphs included in the manuscript are also included herein for ease of comparison and to display statistical variation.

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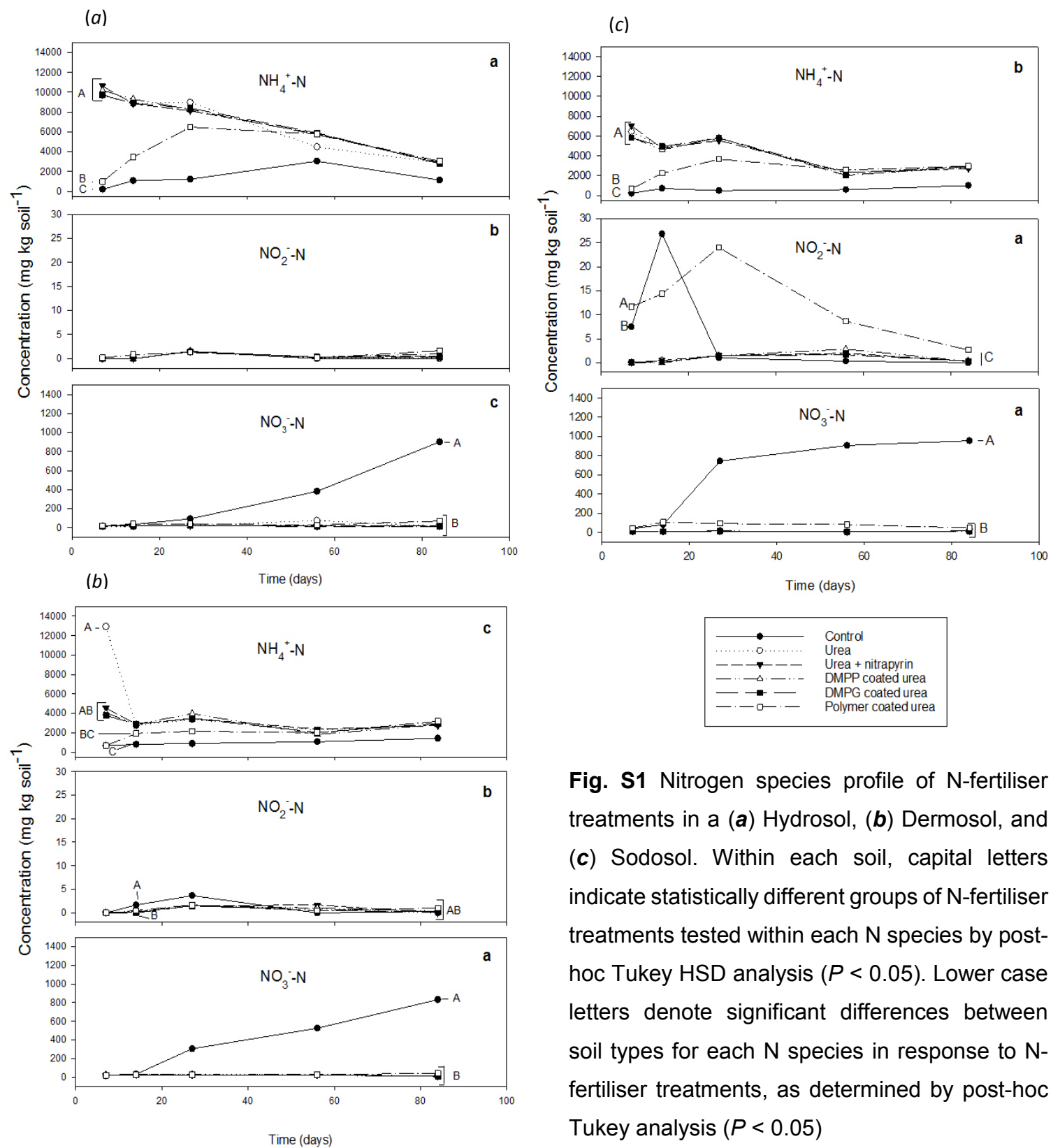


Fig. S1 Nitrogen species profile of N-fertiliser treatments in a (a) Hydrosol, (b) Dermosol, and (c) Sodosol. Within each soil, capital letters indicate statistically different groups of N-fertiliser treatments tested within each N species by post-hoc Tukey HSD analysis ($P < 0.05$). Lower case letters denote significant differences between soil types for each N species in response to N-fertiliser treatments, as determined by post-hoc Tukey analysis ($P < 0.05$)

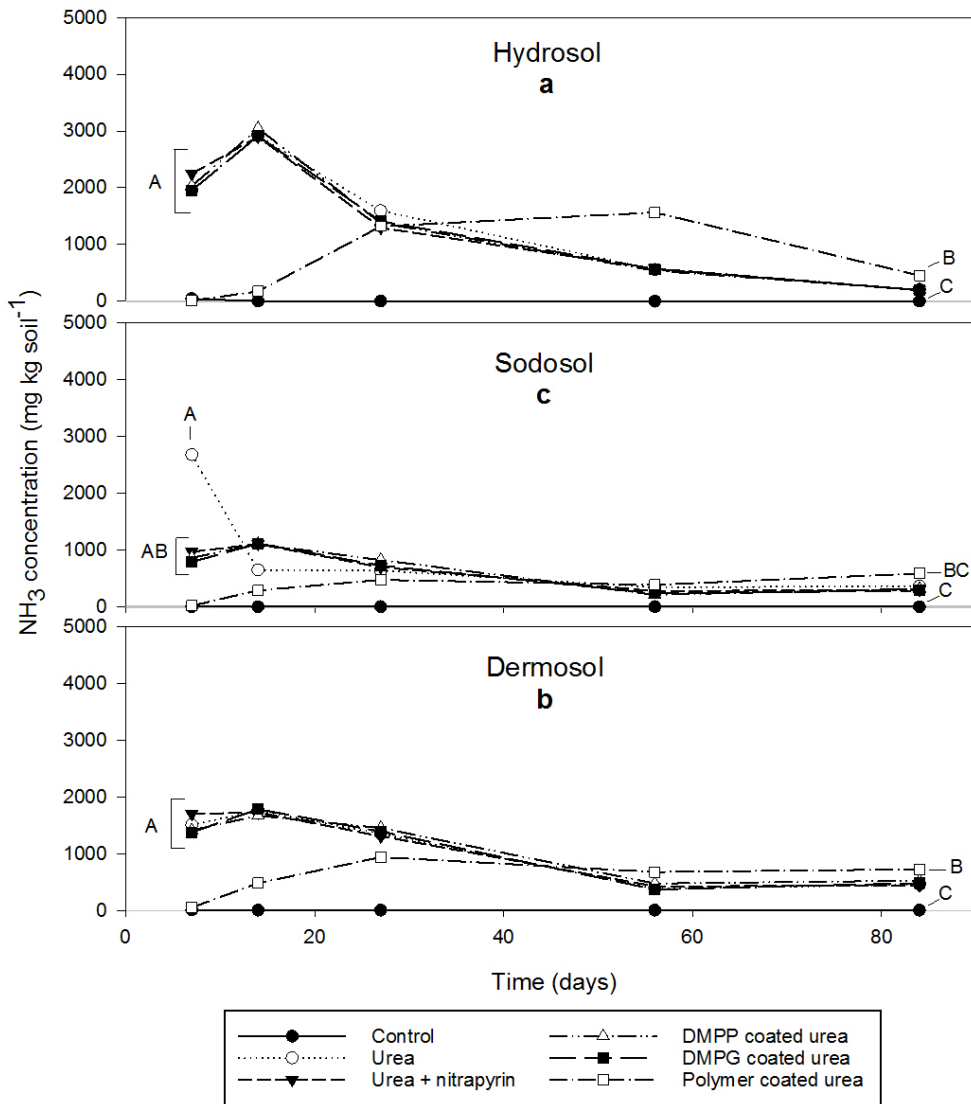


Fig. S2 Calculated aqueous ammonia solution concentrations from N-fertiliser treatments in three different soils. Within each soil, capital letters indicate statistically different NH₃ concentrations between groups of N-fertiliser treatments, determined by post-hoc Tukey HSD analysis ($P < 0.05$). Lower case letters note the significant variation in average NH₃ concentrations between the soil types, using post-hoc Tukey HSD pairwise comparison method ($P < 0.05$)

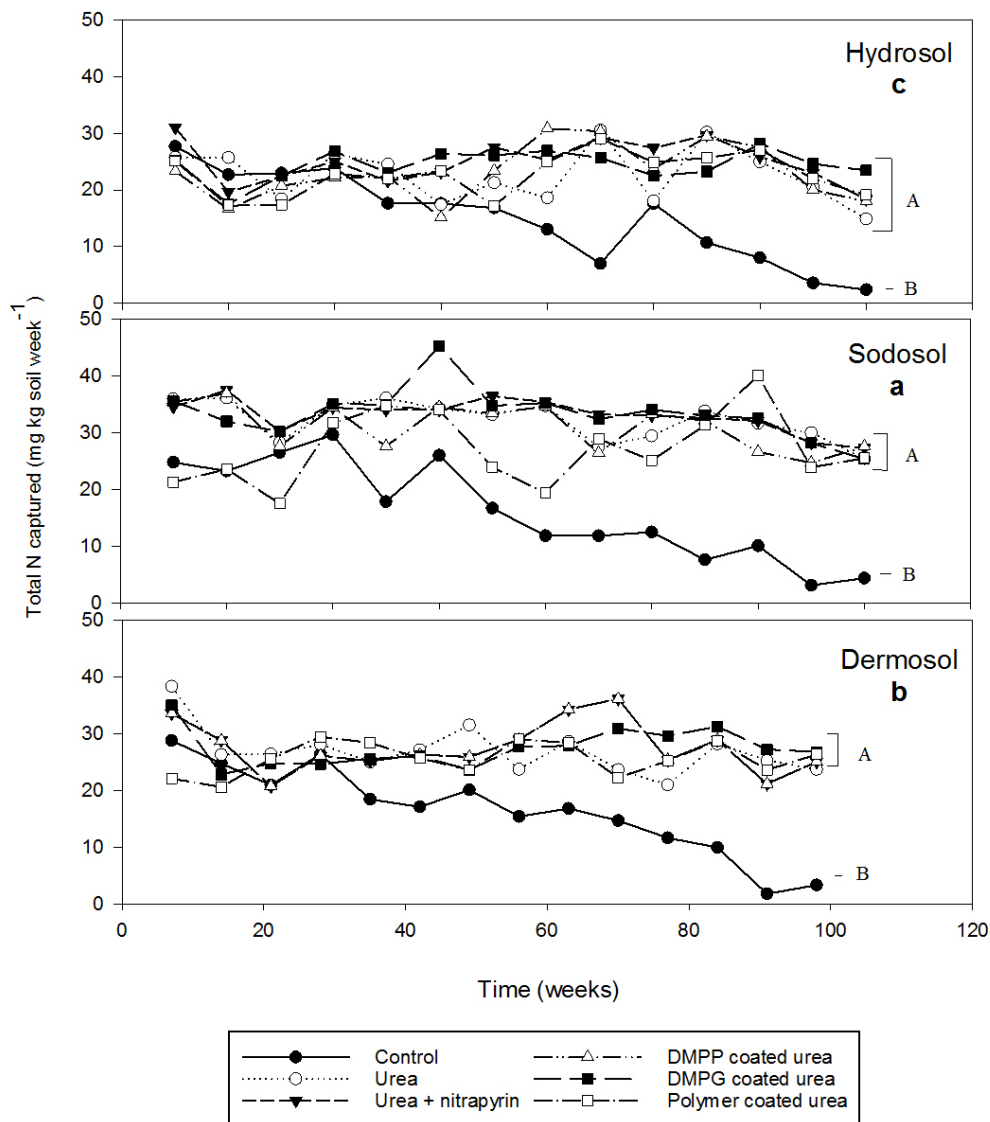


Fig. S3 Measured NH_3 and gaseous N emissions over time. Capital letters indicate significant effects of N-fertiliser treatments within a soil type. Lower case letters denote significant difference of total volatilisation between soil types, as determined by post-hoc Tukey HSD analysis ($P < 0.05$)

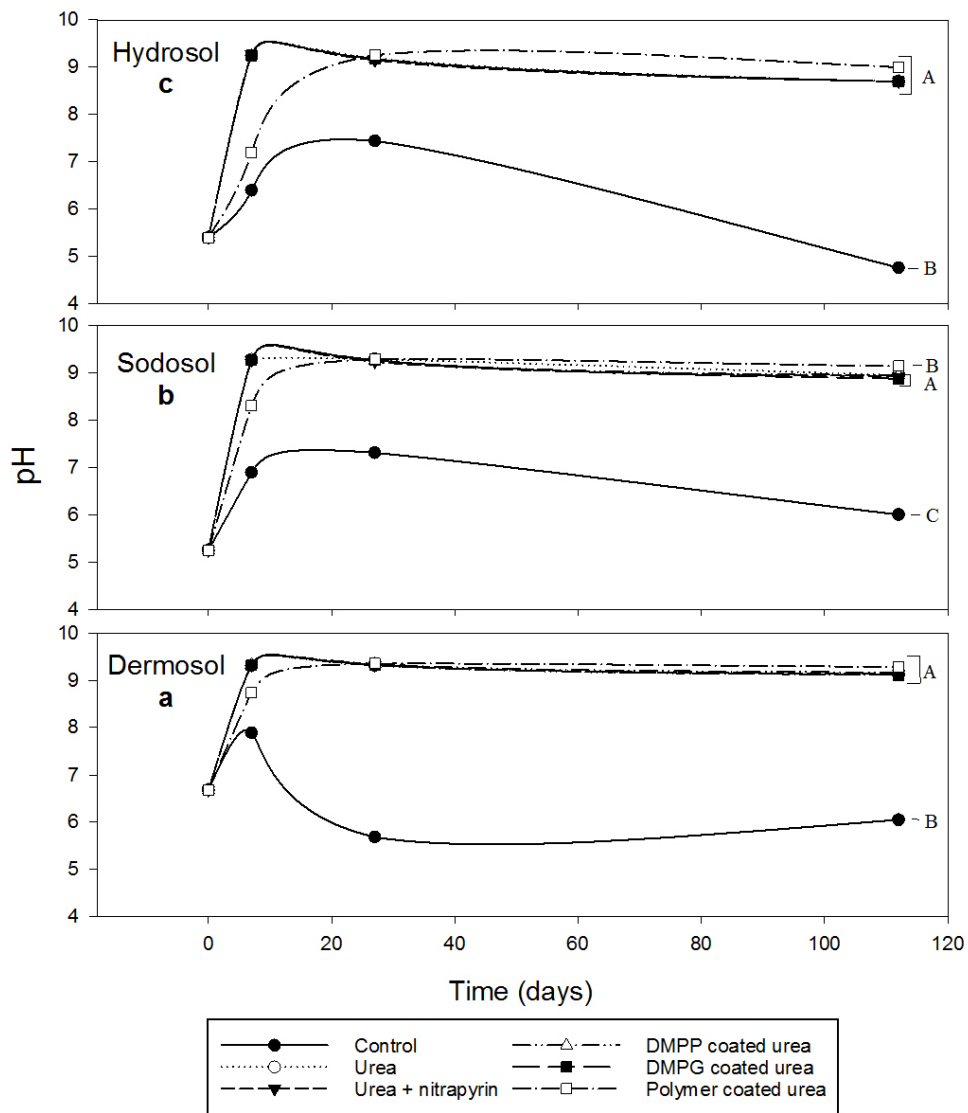


Fig. S4 Changes in soil pH (1:5 water) in response to banded N-fertiliser addition in the Hydrosol, Sodosol, and Dermosol. Capital letters show significant effects of N-fertiliser treatments within each soil type, and lower case letters show statistical variation in overall pH between soil types, as determined by post-hoc Tukey HSD analysis ($P < 0.05$)

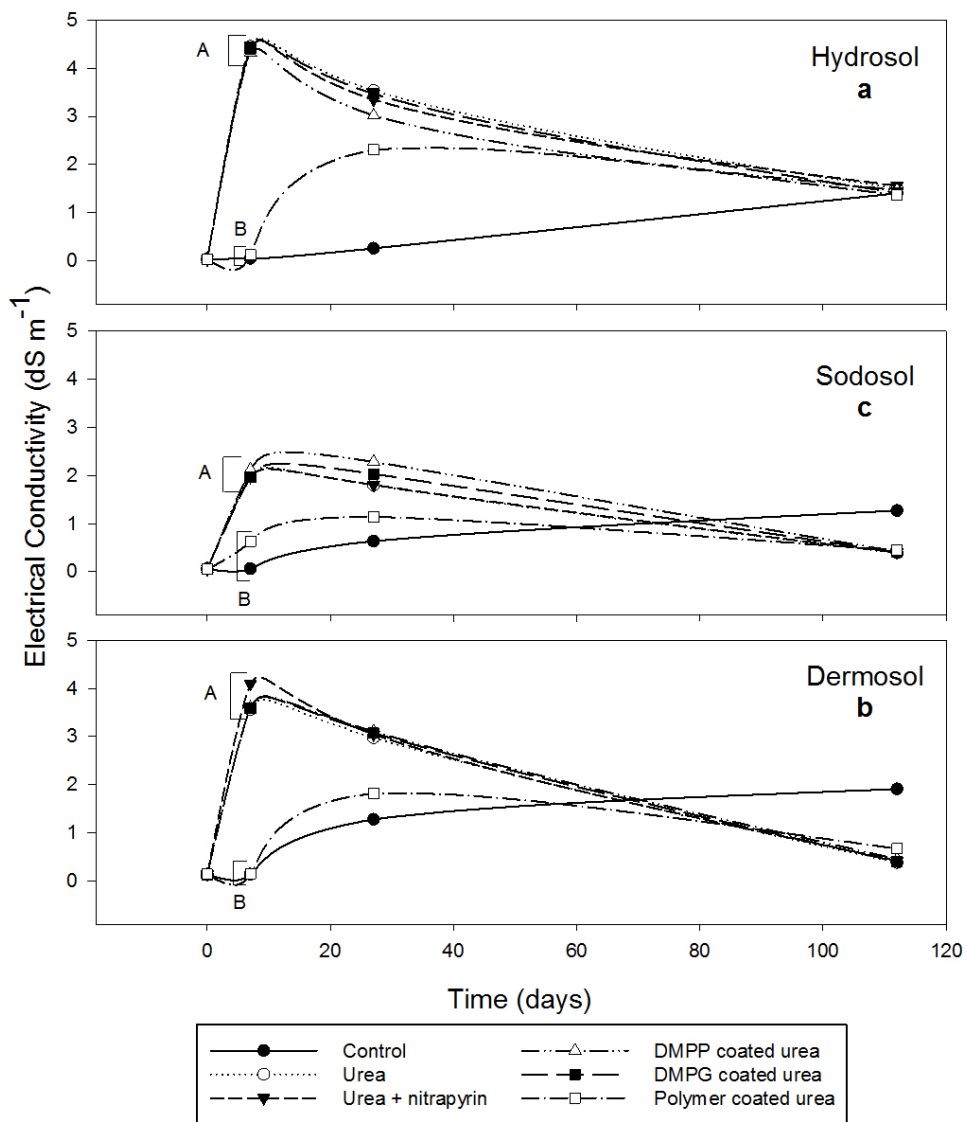


Fig. S5 Mean values of recorded electrical conductivity (1:5 water) over time. Capital letters show significant effects of N-fertiliser treatments within each soil type, and lower case letters denote the statistical variation in overall EC between soil types, as determined by post-hoc Tukey HSD analysis ($P < 0.05$)