# MODELING METAL BINDING TO SOILS: THE ROLE OF ORGANIC MATTER

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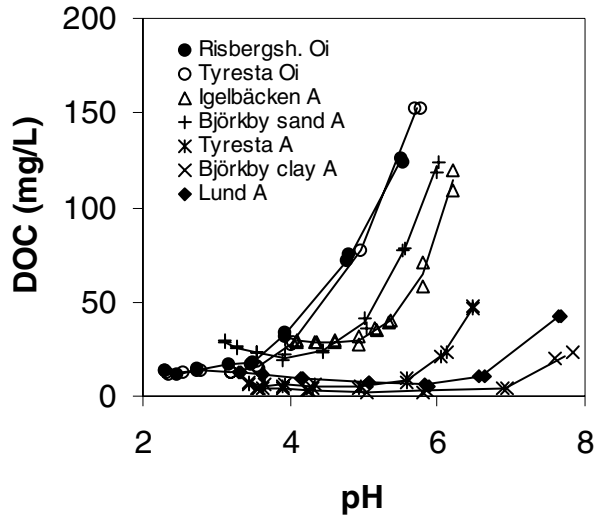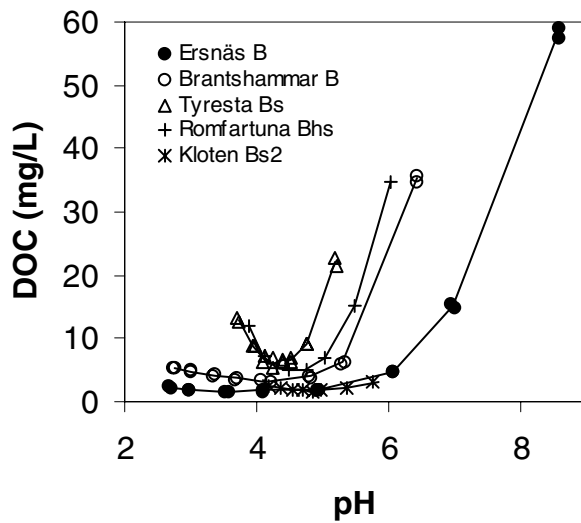## Supporting information:

*Figures*



**FIGURE S1. Observed dissolved organic carbon concentrations in the batch titration supernatants. The symbols represent the observations, the lines are for guidance only.**
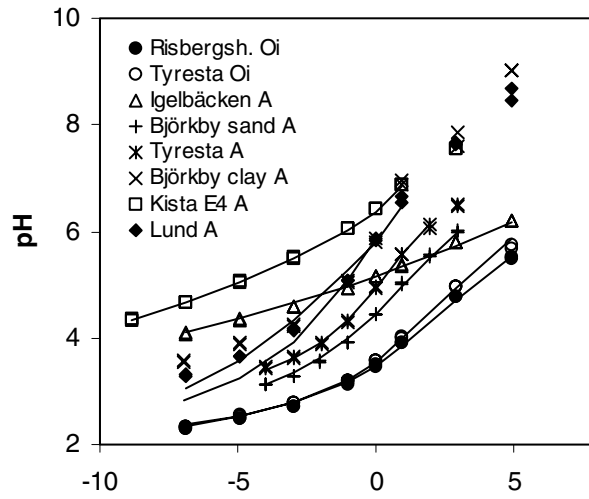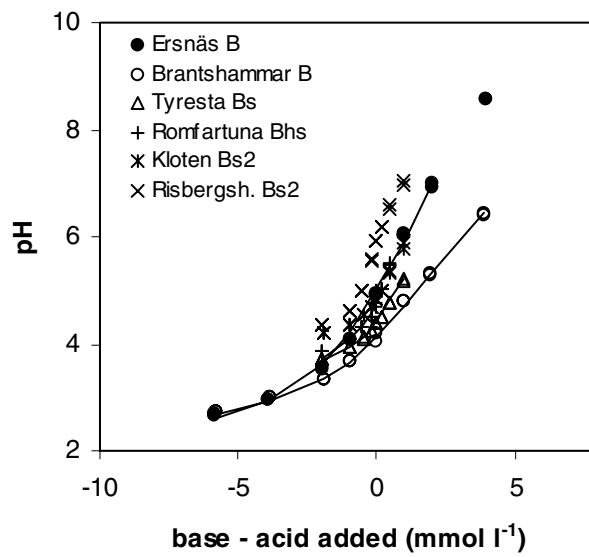
**FIGURE S2.** The pH plotted against base added. The points represent observations, and the lines are the SHM fits.
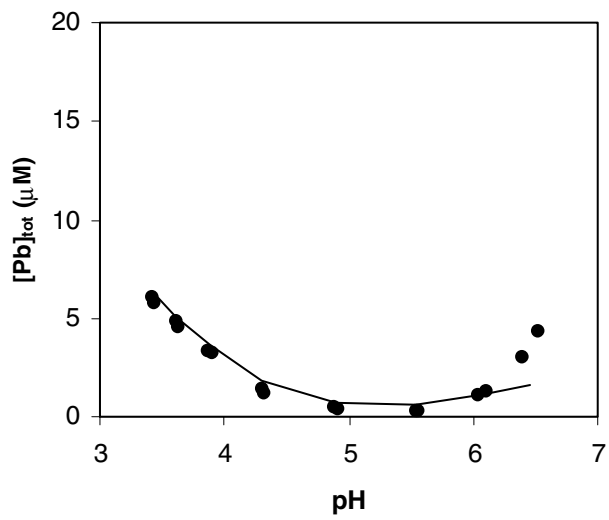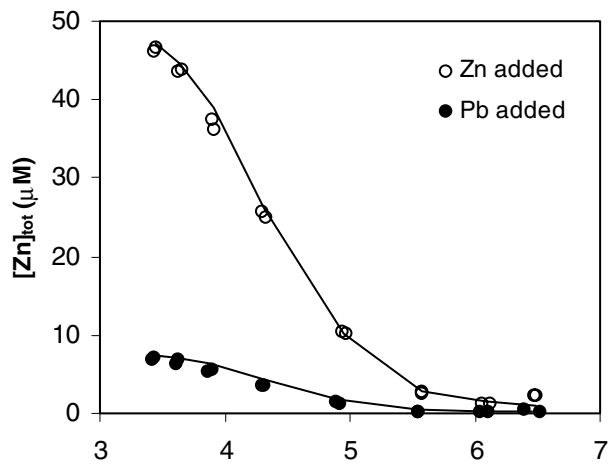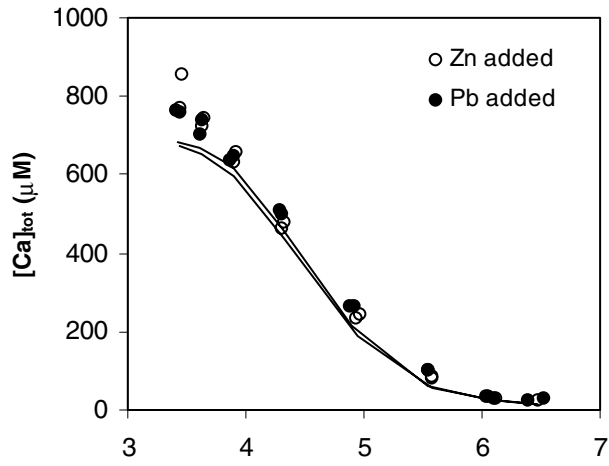
FIGURE S3. Total dissolved Ca, Zn and Pb against pH Tyresta A. Points represent observations. Solid lines are SHM fits.
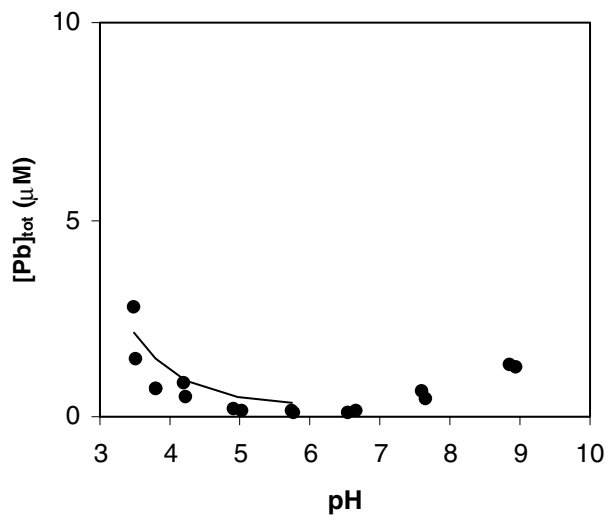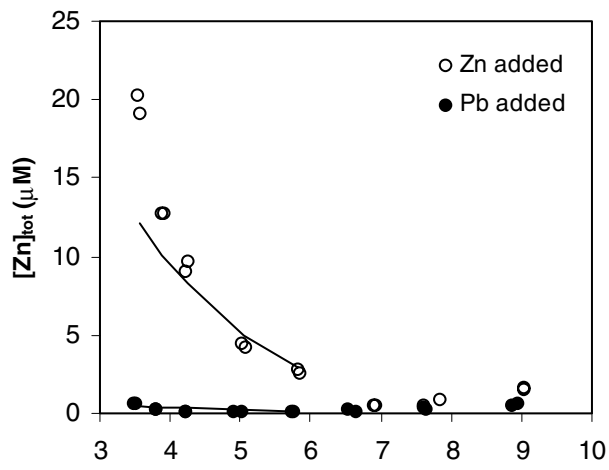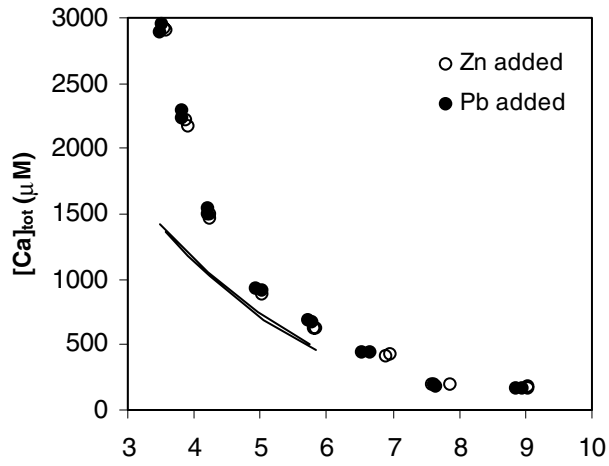
**FIGURE S4. Total dissolved Ca, Zn and Pb against pH for Björkby clay A. Points represent observations. Solid lines are SHM fits.**
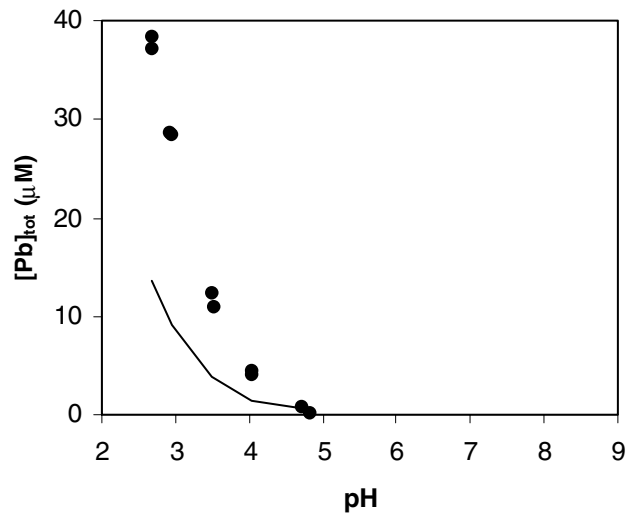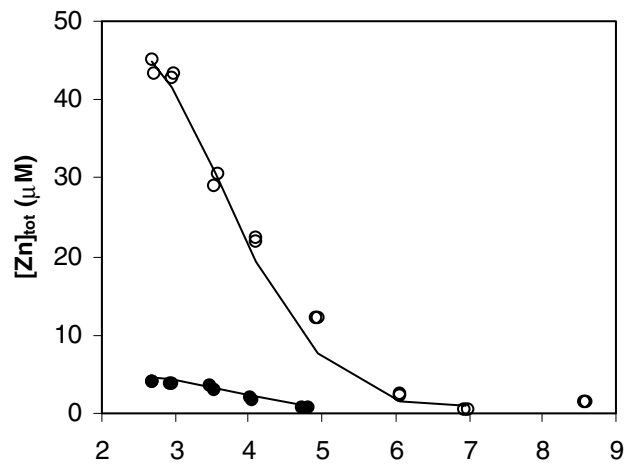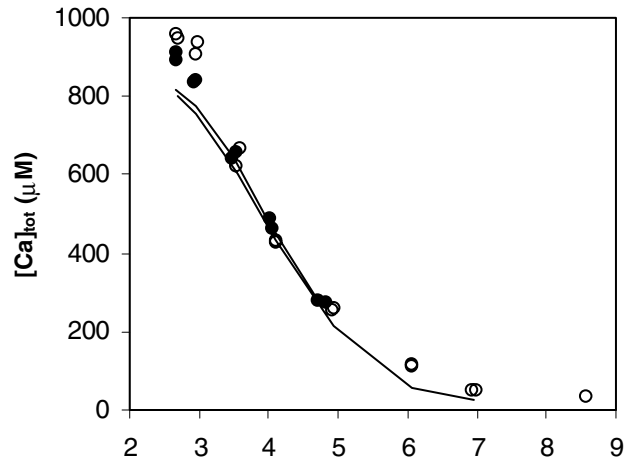
**FIGURE S5.** **Total dissolved Ca, Zn and Pb against pH for Ersnäs B. Points represent observations. Solid lines are SHM fits.**
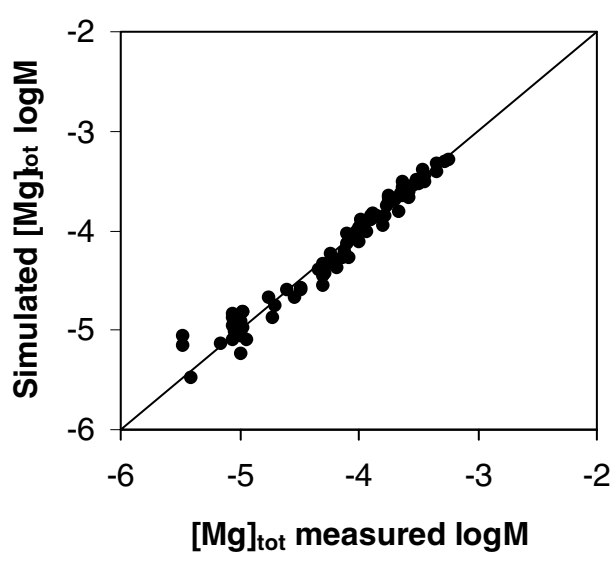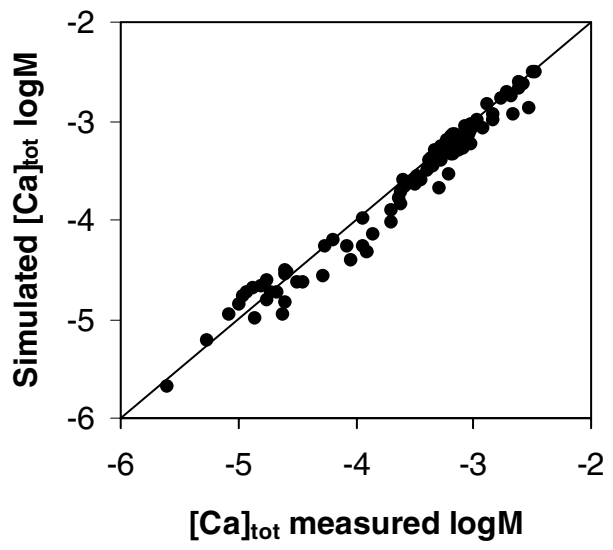
**FIGURE S6. Comparison of the simulated values of $[Ca]_{tot}$ and $[Mg]_{tot}$ with measurements. The line indicates the perfect 1:1 fit.**
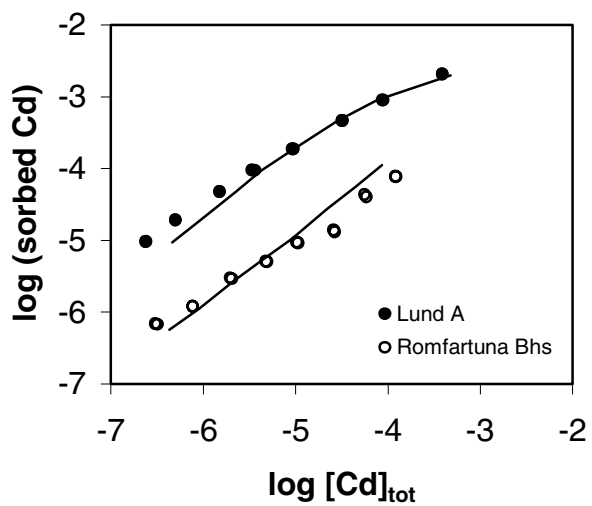
**FIGURE S7. Cadmium sorption (mol kg$^{-1}$) as a function of $[Cd]_{tot}$ (M) for Lund A and Romfartuna Bhs. The lines are SHM fits. The pH ranged from 5.8 (small Cd additions) to 6.6 (large Cd additions) in the Lund soil suspensions. In the Romfartuna suspensions the pH ranged from 4.8 to 4.9.**