## **Supplementary Information**

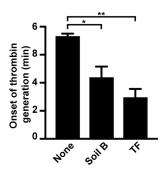


Figure S1. Soils accelerate clotting in mouse plasma in vitro.

The time until onset of thrombin was generated in mouse plasma in the presence or absence of soil. n = 5. \* p < 0.01, \*\* p < 0.001. Error bars represent SEM.

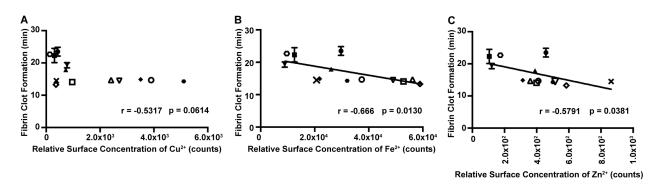


Figure S2. Clot times were moderately correlated with the concentration of transition elements at the soil surface.

(A-C) Elemental composition of soil surfaces was analyzed by TOF-SIMS for  $Cu^{2+}(A)$ ,  $Fe^{2+}(B)$  and  $Zn^{2+}(C)$ . A best fit line was drawn for significantly correlated observation. Clot times were n=5 for all panels.