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Soil fauna, soil properties and geo-ecosystem functioning

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The impact of soil fauna on soil processes is of utmost importance, as the activity of soil fauna directly affects soil quality. This is expressed by the direct effects of soil fauna on soil physical and soil chemical properties that not only have great importance to food production and ecosystems services, but also on weathering and hydrological and geomorphological processes. Soil animals can be perceived as ecosystem engineers that directly affect the flow of water, sediments and nutrients through terrestrial ecosystems. The biodiversity of animals living in the soil is huge and shows a huge range in size, functions and effects. Most work has been focused on only a few species such as earthworms and termites, but in general the knowledge on the effect of soil biota on soil ecosystem functioning is limited as it is for their impact on processes in the soil and on the soil surface. In this presentation we would like to review some of the impacts of soil fauna on soil properties that have implications for geo-ecosystem functioning and soil formation processes.