Distribution of soil microbial biomass and activity along a latitudinal gradient on the Antarctic peninsula

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Introduction

We have undertaken ecological survey and sampled soils from sites in the Maritime Antarctic along the Antarctic Peninsula from South Georgia to the Ronné Entrance. Soil microbial biomass, respiration and organic C contents of soils have been determined.



Results

Distribution of soil microbial biomass and soil respiration





Distribution of soil microbial biomass and respiration with latitude No clear relationship between latitude and soil properties



Relationship of soil microbial biomass with soil organic C

Two populations of soils exist - one with and one without ornithogenic influence





Relationship of soil respiration with soil organic C

Two populations of soils exist - one with and one without ornithogenic influence









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