

Session Type: 90-Minute Symposium

Number: 090-076

Title: Life Beneath Our Feet: Research Challenges in Soil Biodiversity

Session Start/End Time: Sunday, Feb 15, 2009, 1:30 PM - 3:00 PM

Hotel:

Room: HRC Grand A

Admission Policy

Synopsis: Soil is a major habitat for plants and animals. Millions of organisms can be present in just one teaspoon of soil. Fungi, bacteria, nematodes, arthropods, earthworms, and mammals form a complex food web that is still only partially known and understood. Healthy soil provides us with the wide range of ecosystem goods and services that play a crucial role in sustaining life on the planet. However, many aspects of soil biology remain a mystery. Climate change, the increasing use of agro-chemicals, and the rapid decline in organic matter content are threatening the diversity of organisms in soil. Indeed, even the true extent of soil biodiversity, and its origins and functional consequences, are only just beginning to be understood. Protecting the soil habitat against the impact of human activities that could threaten the diversity of species should have the same importance as the protection of natural habitats above ground. However, legislators and policy-makers require relevant information from the research community to act effectively. This symposium will present an overview of our current understanding of the key pressures on life in the soil, describe recent developments that have enhanced our understanding of this crucial yet unknown ecosystem, and establish future challenges for the research community to support the sustainable use of a critical, nonrenewable natural resource.

Organized by:

Aidan Gilligan, European Commission, Joint Research Center, Brussels, Belgium

Presentations:

Symposium Organizer--**Aidan Gilligan**, European Commission, Joint Research Center, Brussels, Belgium

Moderator--**Diana H. Wall**, Colorado State University, Fort Collins, CO

Soil Biodiversity: The Biological Engine of the Earth--**Karl Ritz**, Cranfield University, Cranfield, United Kingdom

Land Use and Climate Change: What Do We Need To Know To Protect Soil Biodiversity?--**Volkmar Wolters**, Institute for General and Special Zoology, Giessen, Germany

Extinction Is Forever: What We Are Losing From the Soil?--**Ciro Gardi**, European Commission, Ispra, Italy