ORGANISERS

- Prof. Peter C. de Ruiter (Chair)
  (Wageningen University)
- Prof. Wim H. van der Putten
  (Netherlands Institute of Ecology)
- Prof. Lijbert Brussaard
  (Wageningen University)
- Dr. Claudius van de Vijver
  (Wageningen University)

INFORMATION AND REGISTRATION

- See: www.pe-rc.nl (under Courses & Activities / PE&RC postgraduate courses)
- For further information contact:
  Claudius van de Vijver
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FEE*

- PE&RC, SENSE and RSEE PhD candidates with an approved Education Plan (TSP)	€ 300,-
- All other PhD participants - Staff of organizing institutes	€ 600,-
- External participants	€ 1.000,-

* Includes coffee, tea, lunches, dinners and course material.

* Excludes B&B (extra cost: €150 to € 250,- pp)

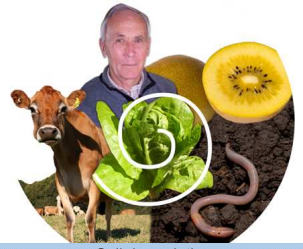
Postgraduate Course

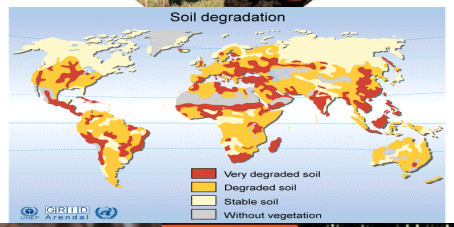
Soil Ecology:

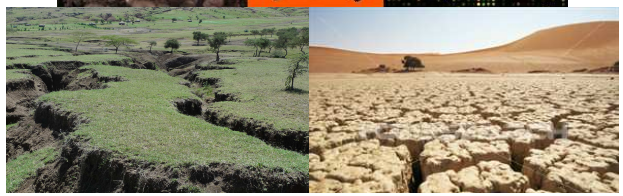
Taking Global Issues Underground

20-24 June 2010

(Wageningen)







Under the auspices of:

- Graduate School for Production Ecology and Resource Conservation (PE&RC)
- Netherlands Research School for the Socio-Economic and Natural Sciences of the Environment (SENSE)
- Research School Ecology and Evolution (RSEE)

SCOPE OF THE COURSE

In contemporary times, the world is challenged by an array of issues that threaten human well-being and the sustainability of our natural environment (e.g. climate change, urbanisation, food and human health). Ecology addresses a variety of these issues and the insight obtained very often contributes to solutions that counter the threats and increase system sustainability. However, we tend to focus on what we see and so the role that the belowground environment can play might be ignored.

This course links soil ecology to the above-mentioned global issues, especially focusing on the role soil organisms can play in solving these issues. Topics dealt with are:

- Soil and Molecular Techniques and Applications
- Soil and Climate
- Soil and Human Needs
- Soil and the World

Besides the focus on the scientific and societal dimensions of soil ecology, new techniques and research methodology will also be addressed.

COURSE SET-UP

The course is composed of a series of lectures, subsequent discussions, a poster session, working group activities, a debating session and an excursion.

- **Lectures and discussion**

Each day starts with international specialists giving their view on the day's topic. After each lecture, a discussion of 30 minutes is held, which is convened by about 3 participants who challenge the speaker on the presentation and papers that the speaker submitted and which participants will receive before the course.

- **Poster session**

Prior to the course, participants must submit a copy of the poster (A1-size) in PDF, which will be printed by the course office. The poster must contain your name and affiliation, title and short description of your research project with one highlight (something exciting) and the reason why you want to participate in this course. On the first evening of the course, participants will briefly (3 minutes) highlight the poster (based on a projected copy of the poster) and on the Monday afternoon, there will be ample time for participants and lecturers to visit individual posters. Posters will remain in the lecture room throughout the course.

- **Working groups**

On the Tuesday and Thursday afternoons, participants will be split into working groups, which will work on the following issues:

a. Soil and Climate (Tuesday):
- What is the most critical soil ecological information that we need to come up with effective mitigation/adaptation strategies?
- If you have money for a PhD-student, what will he/she be going to do regarding soil ecological aspects of climate change?

b. Soil and the World (Thursday):
- What soil ecological information should be part of the Global Soil Map, in relation to important global issues?
- What issues of concern (e.g. scaling) must be considered when making such a map and how can these issues be tackled?

In these sessions, the working groups must compile the output of their discussions, which will be presented at the end of the day.

- **Debating session**

Two groups (about 5 participants per group) will debate on propositions that have been brought forward by speakers or have appeared to be a point of discussion during the course.

SPEAKERS

Introduction Keynote
- David Wardle
  (Swedish University of Agricultural Sciences, Sweden)

Soil and Molecular Techniques & Applications
- George Kowalchuk
  (Netherlands Institute of Ecology / Free University of Amsterdam, the Netherlands)
- Hans Helder
  (Wageningen University, the Netherlands)
- Kate Scow
  (University of California, Davis, USA)

Soil and Climate
- Richard Bardgett
  (Lancaster University, United Kingdom)
- Sarah Hobbie
  (University of Minnesota, USA)
- Wim van der Putten
  (Netherlands Institute of Ecology, the Netherlands)

Soil and Human Needs
- Louise Jackson
  (University of California, Davis, USA)
- Diana Wall
  (Colorado State University, Ft. Collins, USA)
- Heikki Setälä
  (University of Helsinki, Finland)

Soil and the World: The Global Soil Map
- Alfred Hartemink
  (International Soil Reference and Information Centre, Wageningen, the Netherlands).
  Also see: http://globalsoilmap.net/

End of Course Keynote
- Meine van Noordwijk
  (ICRAF, Bogor, Indonesia)