

## Seeing the soil through the net: an eye-opener on the soil map of the Flemish region (Belgium)

Stefaan Dondeyne (1), Laura Vanierschot (1), Roger Langohr (2), Eric Van Ranst (2), Jozef Deckers (1), and Katrien Oorts (3)

(1) Department of Earth and Environmental Sciences, University of Leuven, Celestijnenlaan 200E, B- 3001 Leuven, Belgium (stefaan.dondeyne@kuleuven.be), (2) Department of Geology and Soil Science, Laboratory of Soil Science, Ghent University, Gent, Belgium, (3) Vlaamse Overheid, Departement Leefmilieu, Natuur & Energie, Afdeling Land en Bodembescherming, Ondergrond en Natuurlijke Rijkdommen, Brussels, Belgium

A systematic soil survey of Belgium was conducted from 1948 to 1991. Field surveys were done at the detailed scale of 1:5000 with the final maps published at a 1:20,000 scale. The legend of these detailed soil maps (scale 1:20,000) has been converted to the 3rd edition of the international soil classification system 'World Reference Base for Soil Resources' (WRB). Over the last years, the government of the Flemish region made great efforts to make these maps, along with other environmental data, available to the general audience through the internet.

The soil maps are widely used and consulted by researchers, teachers, land-use planners, environmental consultancy agencies and archaeologists. The maps can be downloaded and consulted in the viewer 'Visual Soil Explorer' ('Bodemverkenner'). To increase the legibility of the maps, we assembled a collection of photographs from soil profiles representing 923 soil types and 413 photos of related landscape settings. By clicking on a specific location in the 'Visual Soil Explorer', pictures of the corresponding soil type and landscape appear in a pop-up window, with a brief explanation about the soil properties. The collection of photographs of soil profiles cover almost 80% of the total area of the Flemish region, and include the 100 most common soil types. Our own teaching experience shows that these information layers are particular valuable for teaching soil geography and earth sciences in general. Overall, such visual information layers should contribute to a better interpretation of the soil maps and legacy soil data by serving as an eye-opener on the soil map to the wider community.