

埼玉大学 総合研究機構  
環境科学研究センター 第8回セミナー

8th Seminar,  
Institute for Environmental Science and Technology, Saitama University

**Title :**

***Soil water repellency, soil organic carbon and  
the filtering function of soils***

開催日時 : 2011年3月7日(月) 15:00~16:30

7th March (Mon.), 2011 15:00 ~ 16:30

場 所 : 埼玉大学総合研究棟 1階 シアター教室

Theater Room, Ground Floor, Bldg. of Research and Project, Saitama Univ.



**Dr. Karin Müller**  
Senior Scientist,  
New Zealand Plant & Food Research Ltd.



<Abstract>

The ability of soils to filter contaminants is a key function that protects the quality of water resources. Soil water repellency is a transient soil property that reduces water infiltration into soils and speeds both the preferential leaching and runoff of agrichemicals, potentially leading to surface and groundwater pollution. In this seminar, the impact of soil water repellency on the filtering capacity of soils is discussed.

If climate-change predictions are accurate, droughts will occur more regularly, making soil water repellency a soil degradation process of increasing concern. A recent survey across all soil orders and five classes of drought proneness of the North Island of New Zealand showed a significant and positive correlation between the occurrence of soil water repellency and the accumulation of soil carbon in the top four centimetres of soils under pastoral land-use. What are the practical implications of these findings our efforts to battle climate change by promoting carbon sequestration in soils ?

問い合わせ先 川本 健 内線4643 ご来聴歓迎いたします

