

Mini-Symposium on above-belowground interactions

17th December 2010

11u00-13u00

Plants provide a linkage between aboveground and belowground systems. While belowground organisms consume roots and plant nutrients, the leaves are eaten by aboveground grazers, which are in turn predated by consumers and parasitoids. Interactions between the above- and belowground subsystems will therefore have an impact on the plant community and associated foodweb structure. These aspects are, however, largely neglected when studying mechanisms that shape plant species composition and diversity, both from a fundamental and applied perspective. We are therefore honoured to present two seminars from experts in the field.

Program:

11u00-11u45:

Dr. ir. Gerlinde de Deyn (NIOO Heteren): Aboveground-belowground interactions and restoration ecology

12u00-12u45:

Dr. ir. Martijn Bezemer (NIOO Heteren): Diversity and stability in semi-natural grasslands: Temporal and spatial dynamics of plant and soil communities

Location: Campus Ledeganck, Lecture room 10.08 (10th floor)

More information: Prof. dr. Dries Bonte (Dries.Bonte@ugent.be)

Selected publications:

De Deyn, G.B., Quirk, H., Yi, Z., Oakley, S., Ostle, N.J., Bardgett, R.D. (2009). *Journal of Ecology* 97: 864-875.

De Deyn G.B., Cornelissen, H. and Bardgett, R.D. (2008) Plant traits and soil carbon sequestration in contrasting biomes. *Ecology Letters* 11: 516-531.

De Deyn, G.B. and van der Putten, W.H. (2005) Linking above and belowground biodiversity. *Trends in Ecology and Evolution* 20: 625-633.

De Deyn, G.B., Raaijmakers, C.E., Zoomer, H.R., Berg, M.P., De Ruiter, P.C., Verhoef, H.A., Bezemer, T.M. and Van der Putten, W.H. (2003) Soil invertebrate fauna enhances grassland succession and diversity. *Nature* 422: 711-713.

Bezemer, T.M.; Putten, W.H. van der (2007). Ecology: Diversity and stability in plant communities. *Nature* 446 (7135). - p. E6 - E7.

Kardol, P.; **Bezemer, T.M.**; Putten, W.H. van der (2006). Temporal variation in plant-soil feedback controls succession. *Ecology Letters* 9 (9). - p. 1080 - 1088.

Bezemer, T.M.; Dam, N.M. van (2005). Linking aboveground and belowground interactions via induced plant defenses. *Trends in Ecology and Evolution* 20 (11). - p. 617 - 624.

Bezemer, T.M.; Lawson, C.S.; Hedlund, K.; Edwards, A.R.; Brooks, A.J.; Igual, J.M.; Mortimer, S.R.; Putten, W.H. van der (2006). Plant species and functional group effects on abiotic and microbial soil properties and plant-soil feedback responses in two grasslands. *Journal of Ecology* 94 (5). - p. 893 - 904.