

Stream 5-52 - Plant-Soil Feedbacks: Bridging Natural and Agricultural Sciences

Wednesday, 31 August 2016, 09:00-10:30

Barthez

Session organizers:

Pierre Mariotte, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*

Paul Kardol, *Swedish University of Agricultural Sciences, Sweden*

- 09:00-09:15 [S05.29]
Soil biodiversity as a driver of ecosystem multifunctionality and sustainability
M.G.A. van der Heijden^{*1}, S.F. Bender¹, L. Koehl¹, K. Schlaeppli¹, C. Wagg¹, R. Wittwer¹
¹*Institute for Sustainability Sciences, Agroscope, Switzerland*, ²*University of Zurich, Switzerland*
- 09:15-09:30 [S05.30]
Plant-soil feedbacks of crop species and their semi-natural relatives
G.B. De Deyn
Wageningen University, The Netherlands
- 09:30-09:45 [S05.31]
Using plant-soil feedbacks to manage plant communities
A. Kulmatiski
Utah State University, USA
- 09:45-10:00 [S05.32]
Plant-soil feedbacks and the resource economics spectrum
Z. Mehrabi^{*1}, S.L. Tuck², J. Kattge³, P.B. Reich⁴
¹*University of Oxford, UK*, ²*Max Planck Institute for Biogeochemistry, Hans Knöll Straße, Germany*, ³*University of Minnesota, USA*, ⁴*Western Sydney University, Australia*
- 10:00-10:15 [S05.33]
Learning from nature: Using plant-soil feedback to improve disease control in greenhouse cutflowers
T.M. Bezemer^{*1}, H. Ma¹, A.W.G. Van der Wurff²
¹*Netherlands Institute of Ecology (NIOO-KNAW), The Netherlands*, ²*Wageningen University and Research Centre, The Netherlands*
- 10:15-10:30 [S05.34]
Effects of agricultural wheat selection on plant trait variability and trait syndromes
A.A.M. Cantarel^{*1,3}, B. Andrieu^{2,4}, V. Allard², J. Enjalbert^{3,5}, J. Gervais^{1,3}, S. Saint Jean^{2,4}, T. Pommier^{1,3}, C. Pope^{2,4}, X. Le Roux^{1,3}
¹*Université Lyon, France*, ²*INRA, France*, ³*CNRS, France*, ⁴*AgroParisTech, France*, ⁵*Université Paris Sud, France*
- 11:00-11:15 [S05.35]
Trading nutrients between drought-tolerant mycorrhizae and hyphae-associated microbes
B. Drigo^{*1}, M. Delgado-Baquerizo¹, F.T. Maestre⁴, P. Mariotte², Y. Carrillo², J. Bougoure³, I.C. Anderson¹, A. Canarini², F. Dijkstra², S. Power¹, R. Ochoa Hueso¹
¹*Western Sydney University, Australia*, ²*The University of Sydney, Australia*, ³*The University of Western Australia, Australia*, ⁴*Universidad Rey Juan Carlos, Spain*
- 11:15-11:30 [S05.36]
Resistance of soil microbial communities and *Lolium perenne* to a drought event: Is there a legacy effect of previous hydric stress?
N. Legay^{*1}, A. Foulquier¹, C. Arnoldi¹, S. Lavorel², J-C. Clément¹
¹*University of Grenoble-Alpes, France*, ²*CNRS, France*
- 11:30-11:45 [S05.37]
Plant-soil feedbacks in increasingly drier Mediterranean oak (*Quercus*) forests
G. Rutten^{*}, L. Gómez-Aparicio
IRNAS-CSIC, Spain
- 11:45-12:00 [S05.38]
Drought modifies plant-soil feedback and plant-plant interaction with persistent effects to subsequent drought
A. Kaisermann^{*1}, F.T. De Vries¹, R.I. Griffiths², R.D. Bardgett¹
¹*University of Manchester, UK*, ²*CEH, UK*

- 12:00-12:15 [S05.39]
Extending the link between forage digestibility, plant traits and litter decomposability across management gradient in pecific-rich rangelands
I. Bumb¹, E. Garnier², E. Kazakou*¹
1UMR CEFE 5175, France, 2Montpellier SupAgro, France
- 12:15-12:30 [S05.40]
Millennia old carbon in deep soil layers is released by plant-soil interactions through mediation by soil microorganisms
T. Shahzad*¹, S. Fontaine¹
1Government College University, Pakistan, 2Unité de Recherche sur l'Ecosystème Prairial-INRA Clermont Ferrand, France