

Program for the workshop
“Biological Soil Crusts in Ecosystems: Their Diversity, Ecology, and Management”
 August 22 – 25, 2010 in Retzbach-Zellingen near Würzburg

Sunday, August 22, 2010:

Time	Topic
From 2 p.m. onwards	Arrival
From 5 p.m. onwards	Registration
6 p.m.	Dinner
From 7 p.m. onwards	Icebreaker

Monday, August 23, 2010:

Time	Topic
9:00 a.m.	Plenary Talk <i>Belnap, J. and Lange, O.L.:</i> Biological soil crusts: where have we been and what is the future?
9:40 a.m.	<i>Dougill, A.J.; Thomas, A.D. and Mairs, H.:</i> Spatial heterogeneity of cyanobacterial soil crusts across the Kalahari: biogeochemical implications and ecological change feedbacks
10:00 a.m.	<i>Friedl, T.; Weber, B.; Mohr, K.I.; Darienko, T.; Salisch, M. and Reisser, W.:</i> Diversity and distribution patterns of green algal communities in Biological Soil Crusts of a southern African region
10:20 a.m.	<i>Malam Issa O.; Rajot, J.L.; Jouliau, K.; Naisse, C.:</i> Microbiotic soil crust distribution and characteristics across latitudinal gradient in Sahelian part of Western Niger
10:40 a.m.	Coffee Break
11:00 a.m.	<i>Zaady, E.; Ben-David, E.A.; Nejidat, A.:</i> Successional stage of biological soil crust: A case study for microphyte and microbial compositions using combined PLFA, DGGE, physical and biophysiological analyses
11:20 a.m.	<i>Pietrasiak, N.; Johansen, J. and Graham, R.C.:</i> Biogeomorphology of biological soil crusts in the Mojave Desert
11:40 a.m.	<i>Williams, W.; Büdel, B.; Driscoll, C.:</i> Cyanobacterial soil and rock crusts from the dune fields to the savannah – An ecosystem report from 260 locations across 1.63 million km ² throughout Queensland, Australia

12:00 a.m.	<i>Peer, T. and Türk, R.:</i> Biological soil crusts in alpine ecosystems
12:20 a.m.	<i>Johansen, J.R.:</i> Taxonomic Diversity in the terrestrial Pseudanabaenales: What happened to <i>Schizothrix calcicola</i> ?
12:30 a.m.	Lunch
2:00 p.m.	<i>Gommeaux, M.; Ayachi, S.; Marin, B.; Ponthieu, M.; Cancès, B., Ralahimanana, C.; Malam Issa, O.; Moerdijk, T. and Stal, L.:</i> Influence of slope and land use on biomass, diversity and physic-chemical properties of BSC sahelian part of western Niger
2:20 p.m.	<i>Dojani, S.; Büdel, B.; Deutschewitz, K. and Weber, B.:</i> Rapid succession of Biological Soil Crusts after experimental disturbance in the Succulent Karoo, South Africa
2:40 p.m.	<i>Pfiz, M.; Küppers, M. and Loris, K.:</i> Wind erosion of lichen dry matter and its recovery in the Central Namib Desert
3:00 p.m.	<i>Li, X.R.:</i> The recovery of biological soil crusts after sand burial in arid desert regions of China
3:20 p.m.	<i>Doudle, S; Williams, W.:</i> Can we kick-start mining rehabilitation with cyanobacterial crusts?
3:30 p.m.	Coffee Break
3:50 p.m.	<i>Gläßer, C.:</i> Mapping and monitoring of lichens and mosses in anthropogenic landscapes using spectral field measurements and hyperspectral airborne imagine spectrometry data
4:10 p.m.	<i>Karnieli, A.:</i> Review of Multispectral and Multitemporal Studies on Biological Soil Crusts over the Sand Dunes of the Northwestern Negev Desert, Israel
4:30 p.m.	<i>Sannier, C.; Beaugendre, N.; Desprats, J.F.; Cerdan, O.; Valentin, C.; Malam Issa, O.; Rajot J.L.:</i> Spatial distribution of biological soil crusts in the Sahel from local to regional scale
4:50 p.m.	<i>Maestre, F.T.; Bowker, M.A.; Escolar, C.; Martinez, I. and Escudero, A.:</i> Testing the stress-gradient hypothesis with biological soil crusts: competition dominates and modulates species richness
5:10 p.m.	<i>Escolar, C.; Maestre, F.T. and Martinez, I.:</i> Effects of global change on the structure and functioning of biological soil crust communities
5:30 p.m.	End of talks
6:30 p.m.	Departure to wine-tasting evening

Tuesday, August 24, 2010:

Time	Topic
9:00 a.m.	Plenary Talk <i>Sancho, L.G.; Pintado, A.; Green, A. and Lázaro, R.:</i> High activity by lichen dominated soil crust in Tabernas desert; one of the hottest and driest areas of Europe
9:40 a.m.	<i>Bouchet, T.; Bertrand, I.; Malam Issa, O.; Desprats, J.F., Rajot, J.L.; Cerdan, O.; Vaentin, C.; Fatondji, D.:</i> Assessment of carbon and nitrogen losses due to water erosion on soil surface with microbiotic crusts in the Sahelian part of western Niger
10:00 a.m.	<i>Thomas, A.D.; Hoon, S.R. and Dougill, A.J.:</i> A revised Q_{10} model to describe soil respiration response to temperature, moisture and light on biologically-cruste soils along the Kalahari Transect
10:20 a.m.	<i>Barger, N.N. and Castle, S.:</i> Towards a better understanding of nitrogen loss pathways in desert ecosystems: Denitrification from biologically crusted soils
10:40 a.m.	Coffee Break
11:00 a.m.	<i>Bouchet, T.; Malam Issa, O.; Alavoine, G. and Bertrand, I.:</i> Can the ecological functions of biological soil crusts from the Sahelian zone quantitatively impact on soil carbon and nitrogen cycles?
11:20 a.m.	<i>Bowker, M.A.; Maestre, F.T.; Mau, R.L.:</i> What determines multi-function in semi-arid soils? Biodiversity and patch size distribution of biological crusts
11:40 a.m.	<i>Williams, W.; Reichenberger, H.; Rose, N.; Büdel, B.:</i> Cyanobacteria highly active during the wet season – a long-term study at Boodjamulla National Park, Queensland, Australia
12:00 a.m.	<i>Colesie, C. and Büdel, B.:</i> Biological soil crusts from Antarctic Dry Valleys: composition and photosynthetic capacity
12:20 a.m.	<i>Cowan, D.A.; Sohm, J.A.; Makhalanyane, T.; Capone, D.G.; Green, T.G.A.; Cary, S.C. and Tuffin, I.M.:</i> Hypolithic communities: a hidden nitrogen source in Antarctic desert soils
12:30 a.m.	Lunch
2:00 p.m.	Departure for exkursion “Mainfränkische Trockenrasen”
6:00 p.m.	Dinner

Wednesday, August 25, 2010:

Time	Topic
9:00 a.m.	<u>Garcia-Pichel, F.; Johnson, S.; Strauss, S.; Potrafka, R.; Bates, S. and Soule, T.:</u> The nitrogen cycle of biological soil crusts: who's doing what where, and why it matters
9:40 a.m.	<u>Breckle, S.-W.; Veste, M.; Littmann, T. and Yair, A.:</u> Arid sand dunes of Nizzana, their biological soil crusts linking pattern and ecosystem processes – an interdisciplinary approach
10:00 a.m.	<u>Yair, A.; Almog, R. and Veste, M.:</u> Differential hydrological response of biological topsoil crusts along a rainfall gradient in a sandy arid area: northern Negev desert, Israel
10:20 a.m.	<u>Fischer, T. and Veste, M.:</u> Biological soil crusts on inland dunes in NE Germany: Can we link succession with hydrology?
10:40 a.m.	Coffee Break
11:00 a.m.	<u>Karsten, U.:</u> “Dry and high” – Ecophysiological performance of filamentous green algae from alpine soil crusts
11:20 a.m.	<u>Lakatos, M.; Hartard, B.; Cuntz, M.; Máguas, C.:</u> Water vapour exchange of biological crusts effects carbon gain, soil properties and C ¹⁸ O ₂ -a novel perspective
11:40 a.m.	<u>Cerdan, O.; Ducluzeau, E.; Desprats, C.; Valentin, C.; Malam Issa, O.; Rajot, J.L.; Bouchet, T.:</u> The role of biological soil crusts in soil detachment
12:00 a.m.	<u>Valentin, C.; Malam Issa, O.; Rajot, J.L.; Cerdan, O.; Desprats, J.F.; Bouchet, T.; Hermann, L.:</u> Variability of hydrological properties of soil surface with microbiotic crusts in the Sahelian part of western Niger
12:10 a.m.	<u>Brankatschk, R.; Töwe, S.; Kleineidam, K.; Schloter, M. and Zeyer, J.:</u> N-Toolbox to assess microbial functions in initial soils
12:30 a.m.	<u>Castillo-Monroy, A.P.; Bowker, M.A.; Maestre, F.T.; Rodriguez-Echeverria, S.; Barraza-Zepeda, C.E.; Escolar, C. and Martinez, I.:</u> Are the functional effects of biological soil crusts mediated by the below-ground bacterial community?
12:40 a.m.	<u>Hoon, S.R. and Thomas, A.D.:</u> The view from within: A new approach to appropriate length scales in order to understand bio-physical processes in biologically crusted dryland soils
12:50 a.m.	Lunch
2:00 p.m.	Farewell