



International Conference

Humus forms and biologically active compounds as indicators of pedodiversity

27-28 August 2012, "Dorpat" conference centre, Tartu, Estonia

Program 27.08.2012

9.00–10.00 Registration and mounting of posters

10.00-10.15 Opening

10.15–11.45 Keynote talks (introduced by R. Kõlli)

10.15–11.00 Humus forms and topsoil classification. Where do we stand? Prof. **Gabriele Broll** (University of Osnabrueck, Germany)

11.00–11.45 The effectiveness of simultaneous chemical and physical analyses as a tool for the understanding of processes and mechanisms in soils. Prof. **Lech W. Szajdak** (Institute for Agricultural and Forest Environment, PAS, Poznań, Poland)

11.45-12.00 Coffee break

12.00 First session (chaired by A. Astover)

12.00–12.20 Classification of Humus Forms – the German approach. **G. Milbert**, G. Broll, C. Wachendorf & U. Graefe (Germany)

12.20–12.40 Biological features of soils: the unifying principles in topsoil classification. **U. Graefe**, G. Broll, G. Milbert & C. Wachendorf (Germany)

12.40–13.00 Humus cover and its fabric depending on pedo-ecological conditions and land-use. **R. Kölli** & I. Tamm (Estonia)

13.00–13.45 Lunch and posters

13.45–14.30 Short introduction of posters (3 minutes per poster, chaired by A. Astover)

14.30 Second session (chaired by U. Graefe)

14.30–14.50 Carbon stock and forest productivity planted on agricultural land. **A. Karklins**, I. Lipenite & M. Daugaviete (Latvia)

14.50–15.10 Stocks of organic carbon in Estonian forest site types as related to forest management. **H. Tullus**, K. Karoles, A. Tullus, R. Kõlli & I. Tamm (Estonia)

15.10–15.30 Organic carbon accumulation in different forest soil types of Estonia. **E. Asi**, T. Timmusk, V. Apuhtin & R. Kõlli (Estonia)

15.30-15.50 Coffee break

15.50 Third session (chaired by L. Szajdak)

15.50–16.10 Why humification so much differs in different environment: genesis and properties of peat humic substances. **M. Klavins**, O. Purmalis, J. Sire & D. Dudare (Latvia) 16.10–16.30 Distribution of organic carbon in humic and granulodensimetric fractions as influenced by sustainable soil use systems. **I. Liaudanskiene**, A. Slepetiene, A. Velykis & A. Satkus (Lithuania)

16.30–16.50 Antioxidative and inhibiting compounds as revealed by field ionization mass spectrometry. **P. Leinweber,** A. Schlichting, D. Rimmer, G. Abbott & S. Heumann (Germany)

16.50–17.20 Concluding remarks

19.00 Dinner and cultural program at the Estonian Agricultural Museum.

28.08.2012 9.00–18.00 Scientific excursion.

List of accepted posters

(sorted by corresponding authors' family name)

Vertical distribution of organic carbon concentration in arable soils. A. Astover & E. Suuster (Estonia)

Effect of cover crops and straw application on soil humic substances. A. Arlauskiene, A. Slepetiene & S. Maiksteniene (Lithuania)

The effect of organic mulches on the amount of organic carbon in the soil. K. Bajorienė, R. Pupalienė, A. Sinkevičienė & D. Jodaugienė (Lithuania)

Studies of acidic properties of humic acids derived from mucks under phosphates ions influence. P. Boguta & Z. Sokołowska (Poland)

The effect of spring oilseed rape crop density on plant root biomass and soil enzymes activity. R. Čepulienė, R. Velička, A. Marcinkevičienė, R. Pupalienė & R. Kosteckas (Lithuania)

The effect of plant residues and fertilization on swards productivity and on soil organic carbon content. K. Kauer, R. Kõlli, R. Viiralt, T. Köster, M. Noormets, T. Laidna, I. Keres, A. Parol, T. Varul, A. Selge & H. Raave

Organic matter in the soils of forest lands of different ages formed on ice lake sandy deposit in Latvia. I. Kukuls, R. Kasparinskis & O. Nikodemus (Latvia)

Influence of temperature on moorsh soils at different stages of transformation as resulting from changes of optical characteristics of humic acids. I. Niemiałkowska-Butrym & Z. Sokołowska (Poland)

Decomposition of alpha-cellulose on semi-natural meadows. J. Peda (Estonia)

The content organic carbon depending on method of soil analysis. P. Penu, T. Köster & J. Rebane (Estonia)

Fractal dimension of organic soil. K. Skic, Z. Sokołowska, I. Niemiałkowska-Butrym & P. Boguta (Poland)

Comparison of different statistical models for predicting soil organic carbon stock. E. Suuster, C. Ritz, H. Roostalu, A. Astover (Estonia)

The changes of nitrate reductase activity in soil under Robinia pseudoacacia shelterbelt and adjoining cultivated field. L. W. Szajdak & W. Gaca (Poland)

Comparative study of lipids from soils under shelterbelts of different age using ¹H and ¹³C NMR spectroscopy. L. W. Szajdak, V. Maryganova, E. Skakovskiy & L. Tychinckaya (Poland & Belarus)

Impact of solvent and properties of secondary transformed peat-moorsh soils on the rates of the dissolution of organic matter. L. W. Szajdak & M. Szczepański (Poland)

The effect of organic fertilisers on soil humus concentration in long-term field experiment. A. Toomsoo, A. Astover, E. Leedu, H. Rossner & T. Teesalu (Estonia)

Technical information

Oral presentations. The speakers have to contact the technician in presentation room in order to upload their presentations before the starting of their session (10 minutes before the session at latest). The length of the oral presentation is 15 minutes (+5 min for questions, discussion). MS PowerPoint software will be used. Posters are advised to mount in the morning after registration. Presenting authors are kindly asked to attend their posters at least 13.45–14.30 and to give in front of poster 3 minutes introduction. Please remove posters after 17.20. Please remove posters after 17.20. The size of the poster is not strictly limited; however we recommend 70 (width) x 100 (height) cm or 90x120 cm.