

State 11. 3. 2010



**International Union
of Soil Science**



**Humboldt-Universität zu Berlin, Germany
17 – 20 March 2010**

Program

**International Conference on Soil Fertility
and Soil Productivity**

- Differences of Efficiency of Soils for Land Uses,
Expenditures and Returns -

Soil fertility based
Beduin barley

Conference site
Albrecht Thaer

Soil investment based
European wheat

Organized by

- International Union of Soil Science (IUSS),
Division 3 - Soil Use and Management,
- University Duisburg-Essen, Germany,
and
- Humboldt-Universität zu Berlin, Germany
together with
- WG Soil Fertility and Plant Nutrition of the German Soil Science
Society
- Society for Plant Nutrition of Germany
- Society of Agronomy of Germany
- International WG Soil Fertility (IOSDV)

Local Organization Committee:

BURGHARDT, Wolfgang (Essen)
ELLMER, Frank (Berlin)
ZEITZ, Jutta (Berlin)
HUEBNER, Wilfried (Berlin)
SCHWEITZER, Kathlin (Berlin)
LAUNERT, Monika (Berlin)
FIENSCH, Nadja (Berlin)
VOGEL, Heiko (Berlin)
RADELOFF, Ulla Kaja (Berlin)
ROß, Christina-Luise (Berlin)
GRÜTER, Maxie (Berlin)
FUCHS, Constance (Berlin)
WANICK, Madeleine (Berlin)
SCHÖNEICH, Sandra (Berlin)

Advisory Committee:

BURGHARDT, Wolfgang (Germany)
CHRISTEN, Olaf (Germany)
GRANSEE, Andreas (Germany)
MUELLER, Torsten (Germany)
WEGENER, Hans-R. (Germany)
WISSEMEIER, Alexander (Germany)

Scientific Committee:

BELL, Richard (Australia)
BURGHARDT, Wolfgang (Chair), (Germany)
CHRISTEN, Olaf (Germany)
FELLER, Christian (France)
GARCIA-OCAMPO, Alvaro (Columbia)
GEORGE, Eckhard (Germany)
GICHERU THUKU, Patrick (Kenia)
KAUPENJOHANN, Martin (Germany)
MCLAUGHLIN, Mike (Australia)
MESIC, Milan (Croatia)
MUELLER, Torsten (Germany)
RYAN, John (Syria - ICARDA)
SABIHAM, Supiandi (Indonesia)
SINGH, Bijay (India)
SMAGIN, Andrei (Russia)
THIOMBIANO, Lamourdia (Burkina Faso, Ethiopia - FAOSFE)
ZHANG, Fusuo (China)
WEGENER, Hans-R. (Germany)

Editor: Prof. Dr. Wolfgang Burghardt

Chair of Division 3 – Soil Use and Management of International Union of Soil Science
(IUSS)

c/o University of Duisburg – Essen, FK of Biology and Geography, Angewandte
Bodenkunde/Soil Technology, Schuetzenbahn 70, 40127 Essen, Germany

E-mail: wolfgang.burghardt@uni-due.de

International Conference on Soil Fertility and Soil Productivity

Location: Humboldt-Universität zu Berlin, Invalidenstraße 42¹⁾, 10115 Berlin
(North site of Hospital Charite)

Date: March 17- 20, 2010

No car parking facilities; Metro station (U):

Naturkundemuseum (old name: Zinnowitzer Straße);

Bus stations: Naturkundemuseum (bus 245) and Invaliden Park (bus 123 and 147)

Remarks: Topics 1, 4, 5, 12, 13, 14 are integrated into the others;

Poster (size DIN A0, 84 cm broad, 119 high) must be hung up latest Wednesday 12:00 and should stay until Friday 15:00

Date 2009	Day	Time	Event
16 th March	Tuesday	14:00-19:00	Registration open
17 th March	Wednesday	8:00-17:00	Registration open
			HALL 3
		9:00-10:00	Opening ceremony
		10:00-10:30	Coffee, tea break
		10:30-12:00	Introductory keynote speeches (each 25 minutes)
		12:00-13:00	Lunch break, lunch options at the university canteen (mensa) nearby
		13:00-14:00	3 poster sessions, Albrecht Daniel Thaer Hall, topics 1,2,4/ 7a/ 8
		14:00-16:00	Oral presentations invited speakers (each 20 minutes)
		16:00-16:20	Coffee, tea break
		16:00-18:00	Oral presentations invited speakers (each 20 minutes)
18 th March	Thursday	8:00-17:00	Registration open
			HALL 2 HALL 3
		8:00-10:00	Oral presentations Topic 2 Topic 7
		10:00-10:20	Coffee, tea break
		10:20-12:00	Oral presentations Topic 2 Topic 7
		12:00-13:00	Lunch break, lunch options at the university canteen
		13:00-15:00	3 poster sessions, Albrecht Thaer Hall, topics 3/ 6/7b
		15:00-16:00	Oral presentations Topic 3 Topic 7
		16:00-16:20	Coffee, tea break
		16:20-18:20	Oral presentations Topic 3 Topic 7
		18:00-22:00	Conference dinner in the Albrecht Thaer Hall of the conference location
19 th March	Friday	8:00-12:00	Registration open
			HALL 2 HALL 3
		8:00-10:00	Oral presentations Topic 9 Topic 8
		10:00-10:20	Coffee, tea break
		10:20-12:00	Oral presentations Topic 10 Topic 8, 6
		12:00-13:00	Lunch break, lunch options at the university canteen
		13:00-15:00	3 poster sessions, Albrecht Thaer Hall, topics 7c,5/9/10,11
		15:00-16:40	Oral presentations Topic 10,11 Topic 6
		16:40-17:00	Coffee, tea break
		17:00-18:00	Closing ceremony, Good by. HALL 3
20 th March	Saturday	8:00-18:30	Excursion, see announcement page 24
21 st March	Sunday		Departure from Berlin

1) From Airport Berlin Tegel take the bus 128 in direction Osloerstr. Get out the bus at Kurt Schumacherplatz. Change to the underground (U). Take the underground in direction Alt Mariendorf. Get out at the station Naturkundemuseum (old name: Zinnowitzerstrasse) (8 stations). The Ticket costs 2.10 EURO. Go the street southwards; next corner right is the Invalidenstrasse.

Content of the Program	Page
Wednesday	5
Thursday	7
Friday	11
Poster Sessions	15
Saturday, Excursion	25

CONFERENCE TOPICS

- | | |
|--|--|
| (1) Concepts of soil fertility and soil productivity, contents chances, limitations and contradictions | (8) Modelling soil fertility, productivity and conservation |
| (2) Soil quality concepts and indicators with respect of soil fertility and soil productivity | (9) Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties |
| (3) Soil properties for soil fertility and for use of soil services | (10) Land management and policy requirements with respect to soil fertility and soil productivity |
| (4) Soil properties for soil productivity and soil investments based services | (11) Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use |
| (5) Limits of soil fertility and soil productivity by other natural plant production factors than soil | (12): Soil fertility and soil productivity under changing global conditions |
| (6) Short time investments for use of soil productivity | (13) Prospect of soil fertility and soil productivity |
| (7) Soil conservation measures to maintain and improve soil fertility and productivity | (14) Others about the thematic soil fertility - productivity |

ORAL presentations			
International Conference Soil Fertility and Soil Productivity, March 17-20, 2010, Berlin			
Wednesday, 17th of March 2010			
Morning			
Time	Name	Country	Title of presentation
HALL 3			
Opening Session			
Chair Person: Olaf CHRISTEN			
German Society of Agronomy, and Institute of Agricultural and Nutritional Science Agronomy and Organic Farming, Martin-Luther-University Halle-Wittenberg, Germany			
09:00- 10:00	Addresses Katrin LOMPSCHER, Senator for Health, Environment and Consumer Protection of Federal Country and City Berlin Uwe Jens NAGEL, Vice President for Academic and International Affairs, Humboldt-Universität zu Berlin Uwe SCHMIDT, Vice Dean, Faculty of Agriculture and Horticulture, Humboldt-Universität zu Berlin Bernd Michael WILKE, German Soil Science Society Olaf CHRISTEN, German Society of Agronomy Hans-R. WEGENER, International Working Group Long-Term Experiments Wolfgang BURGHARDT, International Union of Soil Science		
10:00- 10:30	Coffee, tea break		
Chair Person: John RYAN , Chair (2002-2010) of IUSS Commission 3.3- Soil Fertility and Plant Nutrition, and The International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria			
10:30- 11:00	Heino von MEYER	Germany	Soil fertility and soil productivity in the context of rapid global changes - economic, social and environmental challenges and policy responses
11:00- 11:30	Christian FELLER	France	Soil fertility concepts over the past two centuries: the importance attributed to soil humus in developed and developing countries
11:30- 12:00	Stephan DABBERT	Germany	Soil fertility from the perspective of an agricultural economist
12:00- 13:00	Lunch break: lunch option at the university canteen (Mensa) nearby. Lunch card necessary. Lunch card can be bought at the registration desk of the conference. Lunch cards cost and are load with 20,-EURO. Not for meals and dinks spent amount will be paid pack at the cash desk of the university canteen.		

Wednesday, 17th of March 2010			
Afternoon			
13:00-14:30	Poster Sessions 1, see poster program		
	<p>Topic 1, 2, 4: Concepts of soil fertility and soil productivity, contents chances, limitations and contradictions/Soil quality concepts and indicators with respect of soil fertility and soil productivity/ Soil properties for soil productivity and soil investments based services</p> <p>Topic 7a: Soil conservation measures to maintain and improve soil fertility and productivity</p> <p>Topic 8: Modeling soil fertility, productivity and conservation</p>		
HALL 3			
Oral Session: KEY NOTES			
<p>Chair Person: Alvaro GARCIA – OCAMPO, upcoming chair (2010-2014) of IUSS Commission 3.3 - Soil Fertility and Plant Nutrition, Palmira (Valle del Cauca), Colombia</p>			
14:40-15:00	Lamurdia THIOMBIANO	Ethiopia FAO-SFE	Soil fertility in West Africa
15:00-15:20	Patrick GICHER	Kenya	An overview of soil fertility management, maintenance and productivity in Kenya
15:20-15:40	Bijay SINGH	India	Productivity and Fertility of soils in the Indo-Gangetic plains of South Asia
15:40-16:00	John RYAN and Rolf SOMMER	Syria, ICARDA	Soil fertility and crop nutrition in the Mediterranean region: Retrospects and prospects
16:00-16:20	Coffee, tea break		
<p>Chair Person: Bijay SINGH, Upcoming (2010-2014) vice - chair of IUSS Commission 3.3.- Soil Fertility and Plant Nutrition, ICAR, Punjab Agricultural University, India</p>			
16:20-16:40	Alvaro GARCIA-OCAMPO	Columbia	Fertility and Productivity in soils of Colombia under different management practices and crops.
16:40-17:00	Supiandi SABIHAM	Indonesia	Indonesian peat lands and their ecosystem unique. A science case for conservation and sound management
17:00-17:20	Milan MESIC, Zeljka ZGORELEC, Ivana VUKOVIC , Ivica KISIC, Ferdo BASIC, Aleksandra JURISIC and Krunoslav SAJKO	Croatia	Soil C/N ratio after eleven years of differed nitrogen fertilization
17:20-17:40	Samuel STACEY	Australia	Improving phosphorus and trace element fertilizer efficiency in impoverished soils

Remark: Contributions to the topics 1, 4, 5, 12, 13, 14 have been integrated into other topics...

Thursday, 18th of March 2010
Morning

HALL 2

Topic 2: Soil quality concepts and indicators with respect of soil fertility and soil productivity

Chair Person: Christian FELLER, Vice chair of IUSS commission 4.5 History, Philosophy, and Sociology of Soil Science, IRD (Institut de Recherche pour le Développement), Montpellier, France

08:00-08:20	Christian SIEWERT	Germany	Can we distinguish between natural and utilized soils?
08:20-08:40	Heide SPIEGEL, Georg DERSCH and Andreas BAUMGARTEN	Austria	Are agricultural long-term field experiments a suitable basis to monitor selected indicators for soil quality?
08:40-09:00	Karoline D'HAENE	Belgium	An indicator for soil physical quality in integrated sustainability assessment models
09:00-09:20	Tommy D'HOSE, Mathias COUGNON, Alex DE VliegHER, Erik VAN BOCKSTAELE, Dirk REHEUL	Belgium	Influence of farm compost on soil quality and crop yields
09:20-09:40	Stanisław BROŻEK, Maciej ZWYDAK, Tomasz WANIC, Piotr GRUBA and Jarosław LASOTA	Poland	An application of soil quality concept in silviculture
09:40-10:00	Tahar GALLALI, Nadhem BRAHIM and Martial BERNOUX	Tunesia	Soil quality evolution under different land use in Mediterranean climate condition
	Coffee, tea break		
Chair Person: Patrick GICHERU , upcoming (2010-2014) chair of IUSS commission 3.5 - Soil Degradation; Kenya Agricultural Research Institute, Nairobi, Kenya			
10:20-10:40	Lothar MUELLER, Uwe SCHINDLER, T. Graham SHEPHERD, Bruce C. BALL, Elena SMOLENTSEVA, Chunsheng HU, Volker HENNINGS, Peter SCHAD, Jutta ROGASIK, Jutta ZEITZ, Sandro L. SCHLINDWEIN, Axel BEHRENDT, Katharina HELMING and Frank EULENSTEIN	Germany	A framework for assessing agricultural soil quality on a global scale
10:40-11:00	Siyuan LIANG, Kening WU, Xiuli WANG	China	The evaluation of regional soil productivity in China
11:00-11:20	A.K.SRIVASTAVA and Shyam SINGH	India	Soil fertility criteria for some commercial citrus cultivars of India
11:20-12:00	Christian FELLER, Patrick GICHERU: general discussion of topic 2		
12:00-13:00	Lunch break		

Thursday, 18th of March 2010			
Afternoon			
HALL 2			
13:00- 15:00	Poster Sessions 2, see poster program		
	Topic 3- Soil properties for soil fertility and for use of soil services		
	Topic 6- Short time investments for use of soil productivity		
	Topic 7b- Soil conservation measures to maintain and improve soil fertility and productivity		
Topic 3: Soil Properties for soil fertility and for use of soil services			
Chair Person: Lothar MUELLER, ZALF, Leibniz-Zentrum für Agrarlandschaftsforschung, Müncheberg, Germany			
15:00- 15:20	Torsten MÜLLER	Germany	Are there fundamental differences in the principles of soil fertility and soil productivity management between conventional and organic farming?
15:20- 15:40	Szilveszter BENEDEK, Alaeddin ELFOUGHY, Hosam BAYOUMI and György FÜLEKY	Hungary	Effects of compost application on soil fertility
15:40- 16:00	R.K.KALEESWARI, Richard BELL and Surender MANN	India	Role of organic material on carbon dynamics of saline soils
16:00- 16:20	Sabine HEUMANN, Horst RINGE and Jürgen BÖTTCHER	Germany	Long-term net N mineralization potential as an indicator for soil fertility: chances and constraints
	Coffee, tea break		
Continue - Chair Person: Lothar MUELLER, ZALF, Leibniz-Zentrum für Agrarlandschaftsforschung, Müncheberg, Germany			
16:40- 17:00	Abdelhakim BOUJILA, Tahar GALLALI and Pascal BOIVIN	Tunisia	Relationship between soil constituents and soil physical properties in north Tunisia
17:00- 17:30	Lothar MUELLER: General discussion about topic 3		
18:00- 22:00	Albrecht Daniel Thaer Hall: Conference Dinner (in fees included, only for registered persons)		

Remark: Contributions to the topics 1, 4, 5, 12, 13, 14 have been integrated into other topics...

Thursday, 18th of March 2010, Morning

HALL 3

Topic 7: Soil conservation measures to maintain and improve soil fertility and productivity

Chair Person: Martin KAUPENJOHANN, Institute for Ecology, Technische Universität Berlin, Germany

08:00-08:20	Merjo LAINE, Christoph MÜLLER, Jukka KUROLA and Rauni STRÖMMER	Finland	Nitrogen dynamics in no-tilled and ploughed barley fields
08:20-08:40	Natalya BUCHKINA, Elena RIZHIYA and Eugene BALASHOV	Russia	N ₂ O emission from a loamy sand Spodosol as related to soil fertility
08:40-09:00	Rajan GHIMIRE, Khem Raj DAHAL, Julie G. LAUREN AND John. M. DUXBU	USA	Effects of tillage, crop residue and nitrogen management on soil organic carbon in a rice-wheat rotation system in Nepal
09:00-09:20	M.E. HAQUE and M.A. SATTAR	Bangladesh	Legume residue decomposition and nitrogen fertility in old Brahmaputra floodplain soils of Bangladesh
09:20-09:40	P.K.KARTHIKEYAN, M.RAVICHANDRAN, P.IMAS and M. ASSARAF	India	Application of potassium and magnesium on Turmeric (<i>Curcuma longa</i>) to increase productivity in Inceptisols
09:40-10:00	Annette DEUBEL, Bodo HOFMANN, and Dieter ORZESSEK	Germany	Depth distribution and plant availability of phosphate and potassium depending on tillage system
	Coffee, tea break		

Chair Person: John RYAN, IUSS and The International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

10:20-10:40	Ilyusya GABBASOVA and Ruslan SULEYMANOV	Russia	The use of natural fertilizers and phytoremediation with the aim of increasing the fertility of eroded soils
10:40-11:00	M. Resat SÜMER, J. ZEITZ, G. VERCH	Turkey	Effects of different long-term soil management systems on Unsaturated hydraulic conductivity and penetration resistance in soils in Dedelow - Zalf Muencheberg (Germany)
11:00-11.20	Margarita HIMMELBAUER, Monika SOBOTIK, Willibald-LOISKANDL	Austria	No-tillage farming, soil fertility and maize root growth
11:20-11.40	Muhammad UMER	Pakistan	Effects of organic manure and inorganic fertilizer on soil fertility and the productivity of Sugarcane
11:40-12:00	T. Bhagya LAKSHMI, C. A. SRINIVASAMURTHY, H.M. Atheekur REHMAN and S. BHASKAR	India	Increasing rice production in sodic soil using distillery spentwash as an meliorant and liquid fertilizer.
12:00-13:00	Lunch break		

Thursday, 18th of March 2010, Afternoon			
13:00-15:00	Poster Sessions 2, see poster program		
	Topic 3: Soil properties for soil fertility and for use of soil services Topic 6: Short time investments for use of soil productivity Topic 7b: Soil conservation measures to maintain and improve soil fertility and productivity		
HALL 3			
Topic 7, continue: Soil conservation measures to maintain and improve soil fertility and productivity			
Chair Person: Supiandi SABIHAM , Department of Soil Science and Land Resource, Bogor Agricultural University, Indonesia			
15:00-15:20	Venkataraman SRIRAMACHANDRASEKHARAN, Rengaraj MANNIVANN and Muthuraman RAVICHANDRAN	India	Enhancement of rice productivity and soil fertility through system integration of organics and fertilizers in Vertisols
15:20-15:40	Tchienkoua, MARTIN and Wolfgang ZECH	Cameroon	<i>Chromoleana odorata</i> fallows in southern Cameroon: changes in soil properties and biomass accumulation
15:40-16:00	Gholam Reza RAHBAR, Mohamed Musa Hanafi Sayyed Ahang KOWSAR, and Radziah OTHMAN	Malaysia	The effects of Sowbug (<i>Hemilepistus shirazi</i> schuttz) on soil productivity in a desertification control project
16:00-16:20	M. Kaleem ABBASI, Azhar MUSHTAQ and Majid Mahmood TAHIR	Pakistan	Cumulative effects of white clover residues on the changes in soil properties, nutrient uptake, growth and yield of maize crop in the sub-humid hilly region of Azad Jammu and Kashmir, Pakistan
	Coffee, tea break		
Topic 7 continue: Soil conservation measures to maintain and improve soil fertility and productivity			
Continue Chair Person: Supiandi SABIHAM , Department of Soil Science and Land Resource, Bogor Agricultural University, Indonesia			
16:40-17:00	Heydar LOTFI, and Mehdi SHAFAGHATI	Iran	Current challenges and strategy about the soil conservation in Iran
17:00-17:20	Mohamad Reza NEYSHABOURI, Masoome MIRZAJANI and Shahin OUSTAN	Iran	Effect of organic matter and polyacryl-amide on was, MWD and DC as soil productivity indices in two sandy and clay loam soils
17:20-17:40	John RYAN, Supiandi SABIHAM: General discussion about topic 7		
18:00-22:00	Albrecht Daniel Thaer Hall: Conference Dinner (in fees included, only for registered persons)		

Friday, 19th of March 2010			
Morning			
HALL 2			
Topic 9: Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties			
Chair Person: Bijay SINGH, ICAR, Punjab Agricultural University, India			
08:00-08:20	Muhammad IBRAHIM, Anwar-ul-HASSAN, Muhammad TAHIR, Muhammad SIDDIQUE, Sami ULLAH and Ejaz ASHRAF	Pakistan	Tillage and farm manure affect yield of wheat-rice and soil properties
08:20-08:40	Alar ASTOVER, Avo TOOMSOO, Triin TEESALU, Enn LEEDU, Paul KULDKEPP	Estonia	Changes in soil productivity depending on the use of mineral and organic fertilizers
08:40-09:00	M. CRETENET and P. TITTONELL	France	Long term changes in soil fertility and soil productivity in cotton-based agro-ecosystems of West and Central Africa – evidence from Cameroon
09:00-09:20	Ch. Srinivasa RAO, JVNS. PRASAD, G. Ravindra CHARY, B. VENKATESWARLU, AK. SINGH, KPR. VITTAL, Sumanta KUNDU, SR. SINGH, GN. GAJANAN, RA. SHARMA, An. DESHPANDE, JJ. PATEL and G. BALAGURAVIAH	India	Emerging nutrient deficiencies in tropical India: experiences from long term manurial trials under rainfed conditions
9:20-10:00	Bijay SINGH: General discussion of topic 9		
	Coffee, tea break		
Topic 10: Land management and policy requirements with respect to soil fertility and soil Productivity, and			
Topic 11: Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use			
Chair Person: Milan MESIC, Faculty of Agriculture, University of Zagreb, Croatia			
10:20-10:40	Inom NORMATOV and Zarina ESHONKULOVA	Tajikistan	Study of land degradation processes and possible rehabilitation methods in arid and semi-arid zones of Tajikistan
10:40-11:00	Jan Adriaan REIJNEVELD and Oene OENEMA	The Netherlands	Developments in soil fertility in a recently reclaimed polder in The Netherlands
11:00-11:20	Subhash CHAND, A.R. TARG, George EBERT, Nasir A. DAR, Badrul HASAN	India, Germany	Resource conservation technology for sustainable agriculture
11:20-11:40	Hong MA and Ju HONGBO	China	The significant program for conversion of cropland to forest in China

11:40-12:00	Kening WU, Xianjun CHENG, Siyuan LIANG	China	Study on comprehensive productivity of agricultural land in Northeast China
12:00-13:00	Lunch break		

Friday, 19th of March 2010			
Afternoon			
Poster Sessions 3, see poster program			
13:00-15:00	<p>Topic 7c, 5: Soil conservation measures to maintain and improve soil fertility and productivity/ Limits of soil fertility and soil productivity by other natural plant production factors than soil</p> <p>Topic 6, 9: Short time investments for use of soil productivity/ Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties/ Land management and policy requirements with respect to soil fertility and soil productivity</p> <p>Topic 10, 11: Land management and policy requirements with respect to soil fertility and soil productivity/ Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use</p>		
HALL 2			
Topic 11: Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use			
Chair Person: Milan MESIC , Faculty of Agriculture, University of Zagreb, Croatia			
15:00-15:20	Surendra SINGH	India	Nutrient management of acidic upland for increasing oilseeds and pulses production in Jharkhand
15:20-15:40	Ishak S MARENDA	Indonesia	Land-use guideline at hazardous landslide area in Bandung Regency
15:40-16:20	Milan MESIC: General discussion topic 10 and 11		
16:20-16:40	Coffee, tea break		
16:40-17:20	Final discussion of the conference results, session chairs		
17:20-18:00	Closing Ceremony in Hall 3		

Saturday, 20th of March 2010			
<p>Excursion: start 8:00 exactly in front of the Albrecht Daniel Thaer Hall</p> <p>End: about 18:30 in front of the Albrecht Daniel Thaer Hall</p>			

Friday, 19th of March 2010, continue			
Morning			
HALL 3			
Topic 8: Modelling soil fertility, productivity and conservation			
Chair Person: Torsten MUELLER, Department of Plant Nutrition, University Hohenheim, Germany			
08:00-08:20	S. K. ALAVIPANAH	Iran	Integration of conventional soil surveying with remotely sensed data for reliable soil fertility information (constraints and potentials)
08:20-08:40	Sanjay ARORA	India	Digital Soil Fertility mapping using GPS and simple computer applications for precision nutrient management to optimize crop productivity in India
08:40-09:00	Sybille BROZIO, Mirella ZEIDLER, Hans-Peter PIORR, Frank TORKLER	Germany	A GIS-based tool for humus carbon balance modelling in agriculture
09:00-09:20	Marco NOCITA, Martin BACHMANN, Lammert KOOISTRA, Andreas MÜLLER, Mike POWELL, Silvia WEEL	Germany	Soil spectroscopy as a tool to assess organic carbon in the subtropical Thicket Biome of Eastern Cape Province of South Africa
09:20-09:40	Jorge PAZ-FERREIRO, Marlene C. ALVES, and Eva VIDAL VÁZQUEZ	Spain	Spatial variability of organic matter and nutrients of an Oxisol under three different land uses
09:40-10:00	Coffee, tea break		
10:00-10:20	Torsten MUELLER	Germany	Welcome address of the German Society for Plant Nutrition
10:20-10:40	H. Mohamad ASGARI, F. TARNIAN and M. JAFARI	Iran	Modeling the spatial variability of gypsum in arid environment
10:40-11:00	Tamás HERMANN, Ferenc SPEISER and Gergely TÓTH	Hungary	An internet based tool for soil fertility assessment: the d-e-meter system
Topic 6: Short time investments for use of soil productivity			
Chair Person: Alvaro GARCIA-OCAMPO, Palmira (Valle del Cauca), Colombia			
11:00-11:20	Noura ZIADI, Gilles BÉLANGER, and Annie CLAESSENS	Canada	Using N nutrition diagnostic tools to reduce soil nitrate content in eastern Canada corn production
11:20-11:40	Athyna N. CAMBOURIS, Bernie J. ZEBARTH, Michel C. NOLIN, and Marc R. LAVERDIÈRE	Canada	Site-specific nitrogen fertilization of potato crop
11:40-12:00	Marsh, BRIAN	USA	Cotton response to limited nitrogen under deficit drip irrigation
12:00-13:00	Lunch break		

Friday, 19th of March 2010			
Afternoon			
13:00-15:00	Poster Sessions 3, see poster program		
	<p>Topic 7c, 5: Soil conservation measures to maintain and improve soil fertility and productivity/ Limits of soil fertility and soil productivity by other natural plant production factors than soil</p> <p>Topic 6, 9: Short time investments for use of soil productivity/ Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties/ Land management and policy requirements with respect to soil fertility and soil productivity</p> <p>Topic 10, 11: Land management and policy requirements with respect to soil fertility and soil productivity/ Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use</p>		
Hall 3			
Topic 6, continue: Short time investments for use of soil productivity			
Continue Chair Person: Alvaro GARCIA –OCAMPO, Palmira (Valle del Cauca), Colombia			
15:00-15:20	M. M. HUSSEIN and R. ABO YOUSSEF	Egypt	Influences of potassium foliar fertilization and irrigation by diluted seawater on growth and some chemical constituents of cotton plants
15:20-15:40	Esmail NABIZADEH , Hosain Haidary Sharif ABAD	Iran	Study of nitrogen fixation and nodulation in annual alfalfa (<i>Medicago rigidula</i>) in inoculation with foreign and inside root symbiotic bacteria
15:40-16:00	C. A.SRINIVASAMURTHY,G. SRIDEVI and H. M. Atheekur REHMAN	India	Human urine (a liquid gold) – a supplement to fertilizers in crop production
16:00-16:20	General discussion on topic 6		
16:20-16:40	Coffee, tea break		
16:40-17:20	Final discussion of the conference results, session chairs		
17:20-18:00	Closing Ceremony in Hall 3		

Saturday, 20th of March 2010	
Excursion: start 8:00 exactly in front of the Albrecht Daniel Thaer Hall	
End: about 18:30 in front of the Albrecht Daniel Thaer Hall	

POSTER presentations

International Conf Soil Fertility – Soil Productivity, March 17-20, 2010, Berlin

About 5 minutes for talk and discussion for each poster

Albrecht Daniel Thaer Hall

POSTER SESSIONS 1

Topic 1, 2, 4 (poster no. 1 – 10, 29 – 30):

- **Concepts of soil fertility and soil productivity, contents chances, limitations and contradictions**
- **Soil quality concepts and indicators with respect of soil fertility and soil productivity**
- **Soil properties for soil productivity and soil investments based services**

Chair Person: Olaf CHRISTEN

Institute of Agricultural and Nutritional Science, Agronomy and Organic Farming, Martin-Luther-University Halle-Wittenberg, Germany

Topic 7a (poster no. 60 – 72):

- **Soil conservation measures to maintain and improve soil fertility and productivity**

- Long time effects; farmyard and compost manure -

Chair Person: Martin KAUPENJOHANN,

Institute for Ecology, Technische Universität Berlin, Germany

Topic 8 (poster no. 99 – 110):

- **Modelling soil fertility, productivity and conservation**

Chair Person: Lothar MUELLER

ZALF, Leibniz-Zentrum für Agrarlandschaftsforschung, Müncheberg, Germany

Wednesday, 13:00-14:30

POSTER SESSIONS 2

Topic 3 (poster no. 11 – 28):

- **Soil properties for soil fertility and for use of soil services**

Chair Person: Torsten MUELLER,

Department of Plant Nutrition, University Hohenheim, Germany

Topic 6 (41 – 59)

- **Short time investments for use of soil productivity**

Chair Person: Alexander WISSEMEIER,

BASF Agricultural Center, Limburgerhof, Germany

Topic 7b (poster no. 73 – 85)

- **Soil conservation measures to maintain and improve soil fertility and productivity**

Waste amendments, Change of physical properties

Chair Person: Patrick GICHERU

Kenya Agricultural Research Institute, Nairobi

Thursday, 13:00-15:00

Friday, 19.3.2010	POSTER SESSIONS 3
	Topic 7c (poster no. 86 – 99):
	<ul style="list-style-type: none"> ➤ Soil conservation measures to maintain and improve soil fertility and productivity <li style="padding-left: 40px;">Biochar, ash amendments, nutrients, soil fertility development
	<p>Chair Person: Samuel STACEY Agriculture, Food And Wine, The University of Adelaide, Australia</p>
	Topic 9 (poster no. 111 – 123):
	<ul style="list-style-type: none"> ➤ Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties
	<p>Chair Person: Christian FELLER Vice chair of IUSS commission 4.5 History, Philosophy, and Sociology of Soil Science IRD (Institut de Recherche pour le Développement), Montpellier, France</p>
	Topic 5, 10, 11 (31 – 40, 124 – 131):
	<ul style="list-style-type: none"> ➤ Limits of soil fertility and soil productivity by other natural plant production factors than soil ➤ Land management and policy requirements with respect to soil fertility and soil productivity ➤ Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use
	<p>Chair Person: Milan MESIC, Faculty of Agriculture, University of Zagreb, Croatia</p>

No.	Name	Country	Title of presentation
Topic 1: Concepts of soil fertility and soil productivity, contents, chances, limitations and contradictions, some are included in topics 3 and 6			
1/1	Václav VOLTR	Czech Republic	Concept of the soil fertility and soil productivity into the Czech Republic
1/2	Vincent ANCHIRINAH, Francis BAAH and Frederick AMON-ARMAH	Ghana	Soil fertility management practices of cocoa farmers in the eastern region of Ghana
1/3	Alexander FRID	Russia	Soil fertility and productivity – conceptual and informative aspects
Topic 2: Soil quality concepts and indicators with respect of soil fertility and soil productivity, Some are included in topic 6			
2/4	Piotr GRUBA, Jan MULDER, Stanisław BROŻEK	Poland	Assessment of calcium status in acid forest soils of Poland
2/5	Jarmila MAKOVNIKOVA and Gabriela BARANCIKOVA	Slovakia	Acidification and loss of organic matter in context with soil filtration function
2/6	Munehiro EBATO	Japan	Estimation of the cation balance of soil solutions for vegetable cultivation
2/7	Gajender Kumar ASERI and Nee-lam JAIN	India	Soil biological indicators: a rapid health assessment assay for arid soils of Thar Desert – India

2/8	Ewa BLONSKA	Poland	Soil enzymes activities as indicators of forest soil quality
2/9	Fernando PEREGRINA, Clara LARRIETA, Mikel COLINA and Enrique GARCÍA-ESCUADERO	Spain	Effect of permanent cover crop in a semiarid vineyard on soil quality and N fertility
2/10	Sybille BROZIO, Mirella ZEIDLER, Hans-Peter PIORR, Frank TORKLER	Germany	Development of a digital European soil productivity rate dataset for biomass yield modelling
2/10a	Nasser ALIASGHARZAD, Aliasghar JAFARZADEH, Leyla ALIPOUR and Alireza TAVASSOLI.	Iran	Assessing land use impacts on soil quality using biological indicators
Topic 3: Soil properties for soil fertility and for use of soil services, some are included in topics 6, 7 and 9			
3/11	Piotr SKLODOWSKI and Anna BIELSKA	Poland	Properties and use of Polish sandy soils
3/12	M. ABDAL and M. SULEIMAN	Kuwait	Soil fertility impact on sandy soil of Kuwait
3/13	Józef Chojnicki, Joanna Piotrowska	Poland	Genesis, properties and fertility soils of the "Rybitew" reservation in the Kampinos national park
3/14	Mihály KOCSIS, András MAKÓ and Andrea FARSANG	Hungary	Soil fertility assessment of Chernozem soil varieties with high clay content area in South Hungary
3/15	Jafar ALIOLAD, Neda MOHAMMADI and Ali Ebrahimi MEIMAND	Iran	Assessment and studying micromorphological characteristics of some forest soils of Nowshahr Kheyroudkenar (Mazandaran province)
3/16	BORIS M. KOGUT	Russia	Agroecological estimation of the humus content in soils of Eurasia
3/17	HAROON, Riaz A. KHATTAK, Dost MUHAMMAD, Ishaq A. MIAN, Muhammad RIAZ, and Malcolm S. CRESSER	Pakistan	Mechanism(s) of humic acid induced beneficial effects in salt-affected soils
3/18	Zeynep DEMIR and Coskun GULSER	Turkey	Effects of surface application of hazelnut husk on DTPA extractable micro element contents along a soil depth
3/19	Adel REYHANITABAR	Iran	Carbonate remove effect on zinc sorption in the selected soils from Iran.
3/20	Agnieszka MEDYŃSKA, Cezary KABALA	Poland	Calcium and magnesium concentrations in forest litters under impact of copper industry
3/21	David FANGUEIRO	Portugal	Influence of nitrogen content in soil solution on the potential nitrogen mineralization from organic residues
3/22	Gabriella MÁTHÉ-GÁSPÁR, Nándor FODOR, Péter CSATHÓ, Tamás NÉMETH	Hungary	Phosphorus, nitrogen and oil content of Canola seed in response different soil types.

3/23	Mostafa EMADI, Majid BAGHERNEJAD and Asma NAJAFIAN	Shiraz, Iran	Phosphorus fractions in highly calcareous soils in arid and semiarid regions
3/24	Dragutin PETOSIC, Vlado KOVACEVI , Drazen KAUCIC	Croatia	Phosphorus and potassium status in hydromorphic soils of Sava Valley area in Croatia
3/25	Shivali DATTA , Nanak PASRICHA, and Vinay SINGH	India	Comparison of kinetics of non-exchangeable potassium release in five bench-mark soil series
3/26	Christopher O. ADEJUYIGBE and Elizabeth O. KODAOLU	Nigeria	Faunal population as parameter for soil fertility assessment: a case of soil microarthropod study in South-Western Nigeria
3/27	Mostafa EMADI, Majid BAGHERNEJAD and Asma NAJAFIAN	Iran	Changes in land covers on soil physico-chemical properties in Northern Iran
3/28	Suzanne E. ALLAIRE, Athyna CAMBOURIS, Jonathan LAFOND, Sébastien LANGE, Bernard PELLETIER, and Pierre DUTILLEUL	Canada	Relationship between soil physico-chemical properties at different field scales
Topic 4: Soil properties for soil productivity and soil investments based services , some are included in topics 3 and 5			
4/29	Tomáš LOŠÁK, Pavel ČERMÁK, Jaroslav HLUŠEK	Czech Republic	Changes in fertilisation and liming of soils of the Czech Republic in the past 20 years
4/30	Roberto TUECHE and Lindsey NORRGROVE	Germany/ Cameroon	Tomato (<i>Lycopersicon lycopersicum</i>) yield and physical properties of soils as affected by land preparation techniques in Southern Cameroon
Topic 5: Limits of soil fertility and soil productivity by other natural plant production factors than soil			
5/31	Manoochehr FARBOODI, Shahrām SHAHROKHI, Kaveh KHAKSAR, and Mansoor NAVABZADEH	Iran	The effect of planting densities and nitrogen levels on the yield and components of wheat in Iran
5/32	D. FLORES-SANCHEZ, A. PASTOR, E.A. LANTINGA, and A.A.H. ROSSING	The Netherlands	Exploring maize-legume intercropping systems in South East Mexico
5/33	Mehmet AYDIN, Mustafa Ali KAPTAN, and Zeynel DALKILIÇ	Turkey	Cracked fruit ratio in fig (<i>Ficus carica</i> L. Cv. <i>Sarilop</i>) plantations of the lowland of Aydin, Turkey
5/34	Tomasz WANIC and Piotr DZUMEK	Poland	The influence of Norway spruce stand on the biomodifications of Carpathian beech forest site
5/35	Deeksha KRISHNA and H.K.SACHAN	India	Effect of arbuscular mycorrhizal fungi on the nutrient uptake by finger millet plant at different concentrations of zinc

5/36	Zarrin Taj ALIPOUR, Mohammad Jafar MALAKOUTI, and Mustafa SAEEDI	Iran	Effect of azotobacter chroococcum and vermicompost on the nutrition of apple seedling in a calcareous soil
5/37	Muhammad IMRAN, Torsten MÜLLER, Volker RÖMHELD and Günter NEUMANN	Germany	Nutrient seed priming enhances soil productivity under abiotic stress conditions
5/38	Neda MOHAMMADI, Jafar ALI-OLAD, and Seid Hossain Mir Seid HOSSAINI	Iran	Effect of seed priming with potassium nutrient solution on germination rate and percentage of Brassica napas
5/39	Neda MOHAMMADI, Jafar ALI-OLAD, and Seid Hossain Mir Seid HOSSAINI	Iran	Effect of seed pretreatment with potassium nutrient solution on growth and nutrition of Brassica napas in a saline soil
5/40	Saman Hassan nezhadian Fard and Yahya EMAM.	Iran	Morphological and physiological responses of four sweet corn (<i>Zea mays saccharata</i>) hybrids to different levels of nitrogen in Fars Province
Topic 6: Short time investments for use of soil productivity , some are included in topic 7			
6/41	Péter RAGÁLYI and Imre KÁDÁR	Hungary	Effect of organic fertilizers made from slaughterhouse wasre
6/42	Imre KÁDÁR and Péter RAGÁLYI	Hungary	Mineralization and grass productivity in a long term field experiment
6/43	Mansour NAVVABZADEH and Manoochehr FARBOODI	Iran	Impact of different of N-fertilizers on the nitrate content of spinach
6/44	Julie LAJEUNESSE and Denis PAGEAU	Canada	Effect of split nitrogen fertilization on flax production
6/45	Athyna N. CAMBOURIS, Noura ZIADI, and Cynthia GRANT	Canada	Potato yield as affected by rate and source of nitrogen fertilizer
6/46	L .SHAFEA, M. SAFFARI, Y. EMAM, AND G. MOHAMMADI-NEJAD	Iran	Evaluation of interaction between nitrogen and zinc on maize (<i>Zea Mays L.</i>)
6/47	Sanja SIKORA, Katarina HUIĆ BABIĆ, Mihaela BLAŽINKOV, Mario SRAKA, Sulejman REDŽEPOVIĆ	Croatia	The effect of mineral nitrogen fertilization on microbial properties of Terra Rossa soil in Istria
6/48	Ahamad ASGHARZADEH , Alireza TAVASOLI,Vafa TO-SHIH,Naiab DANESHI, Mohammad Ghasemzadeh GANJABI, Asadollah ROSTAMI, Reza SOLAIMANI, Hamid MAHMODI, Mohammad Sadegh ASADEAN, Manocher KALHOR, and Wils BELSON	Iran	Decreasing the utilization of nitrogen fertilizers through improvement the biological nitrogen fixation(bnf) in chickpea cropping area of Iran
6/49	Esmail NABIZADEH , Hosain Haidary Sharif ABAD	Iran	Study of nitrogen fixation and nodulation in annual alfalfa (<i>Medicago rigidula</i>) in inoculation with foreign and inside root symbiotic bacteria

6/50	Annie CLAESSENS, Noura ZIADI, Gilles BÉLANGER, Louis LEFEBVRE, Nicolas TREMBLAY, Léon-Étienne PARENT, Athyna N. CAMBOURIS, and Michel NOLIN.	Canada	Critical nitrogen curve and nitrogen nutrition index for wheat produced in Eastern Canada
6/51	Stanisław KALEMBASA	Poland	New method for the sequential analysis of nitrogen and carbon of spent mushroom substrate
6/52	Dorota KALEMBASA	Poland	Fertilizing value of spent mushroom substrate
6/53	Abdel Khalek SELIM	Egypt	Nutrient uptake by wheat as affected by nitrogen and sulphur applications
6/54	Subhash CHAND, A.R .TRAG , S.K. BANSAL, George EBERT , Tahir ALI , J.A Wani	India, Germany	Effect of K + Mg fertilization on quality of apple(<i>Malus domestica</i>) fruits c.v. <i>Red delicious</i> in low K fertility soils of temperate Kashmir
6/55	Denis PAGEAU, Julie LAJEUNESSE, Philippe SEGUIN, and Gilles TREMBLAY	Canada	Phosphorus and potassium fertilization of soybean grown in a cool climate
6/56	Nosratollah NAJAFI and Hassan TOWFIGHI	Iran	Effects of soil moisture regimes and P fertilizer on available-P and inorganic-P fractions in some paddy soils of north of Iran
6/57	Nándor Fodor, Péter Csathó, László Radimszky, József Németh, Gabriella Máthé-Gáspár	Hungary	Environmentally friendly fertilizer recommendation system for sustainable land use.
6/58	Mohammad NASRI, Mansoureh KHALATBARI, Farzad PAKNEJAD	Iran	Testing alternative furrow irrigation under different nutritional element supply on some agronomic traits and seed qualitative parameters in corn (<i>zea mays</i> L.)
6/59	Joy, ODEDINA, Stephen OJENIYI, Samson ODEDINA	Nigeria	Integrated nutrient management for sustainable cassava production in south Western Nigeria
6/59	Péter CSATHÓ, László RADIMSZKY	Hungary	Towards a harmonious NP nutrition practice in the EU: how to diminish the gap between the Western and Eastern part of the Union?

Topic 7: Soil conservation measures to maintain and improve soil fertility and productivity

7a: Long time effects; farmyard and compost manure

7/60	Manuel CASANOVA, Osvaldo SALAZAR, Oscar SEGUÉL, Francisco NÁJERA DE FERRARI, Rocío VILLARROEL, Carolina LEIVA	Chile	Long term monitoring of soil fertility for agroforestry combined with water harvesting on central zone of Chile
7/61	M. HOZAYN, E.M. Abd EL-LATEEF; T.Gh. BEHAIRY and A.A. BAHAR	Egypt	Effect of some preceding crop residues on yield, nutritional status and soil properties in newly reclaimed sandy soils

7/62	Adriano Stephan NASCENTE, Tarcísio COBUCCI and Carlos Alexandre Costa CRUSCIOL	Brazil	Effect of time of desiccation of <i>Zea mays</i> , <i>Panicum maximum</i> , <i>Brachiaria brizantha</i> , <i>Brachiaria ruziziensis</i> AND <i>Pennisetum glaucum</i> on the productivity of upland rice in no-tillage system
7/63	Domenico VENTRELLA, Angelo FIORE, Marcello MASTRANGELO, Francesco FORNARO, and Donato FERRI	Italy	Long-term effects of crop residues management on soil fertility for winter wheat cultivated in Southern Italy
7/64	Ayu TOYOTA and Jan FROUZ	Czech Republic	Effects of tillage, clover and soil fauna on soil services in agro-ecosystems
7/65	Monika JOSCHKO, Dietmar BARKUSKY, Jutta ROGASIK, Catherine FOX, Robert GELLERT, Beate BUCHHOLZ, Frank ELLMER	Germany	Reduced soil tillage improves soil fertility in an on-farm study on sandy soil
7/66	M. CHANDRAKALA and Narayan S. HEBSUR	India	Effect of farm yard manure and fermented liquid manures on soil properties, yield and quality of chilli (<i>capsicum annum l.</i>)
7/67	Aliyu UMAR, A. U. GBANGUBA, and Aliyu BAKO.	Nigeria	Integrated management of crystallizer and poultry manure for lowland and upland rice production in Central Nigeria.
7/68	Sanjay ARORA	India	Soil fertility restoration and carbon enrichment through organic manuring in paddy soils of Jammu (j&k), India
7/69	Christopher O. ADEJUYIGBE, Johnson K. ADESODUN, Phil J.C HARRIS and Isaac O.O. ALYELAAGBE	Nigeria	Potential of on-farm produced compost and organic amendments in soil fertility management for organic maize production in South-Western Nigeria
7/70	Ridvan KIZILKAYA , F.Şuheyda HEPSEN TURKAY, Cafer TURKMEN, Murat DURMUS	Turkey	Vermicompost effects on the wheat yield and nutrient contents in soil and plant
7/71	Wiesław SZULC, Beata RUTKOWSKA, Jan ŁABĘTOWICZ, Wojciech STĘPIEŃ	Poland	Effect of compost obtained from waste champignon substrate on selected fertility indicators of sandy soils
7/72	Sindor Pardayev	Uzbekistan	Effect of composts prepared from municipal solid waste in the agrochemical properties of Serozem soils of Uzbekistan
7b: Waste amendment, Change of physical properties			
7/73	Saime SEFEROGLU, Gönül AYDIN and Mehmet AYDIN	Turkey	Impact of olive oil solid and liquid waste applications on some properties of soil
7/74	Raja DAKHLI, Houcin TAAMALLAH, Kanel NAGA,Z and Ridha LAMOURI	Tunesia	Olive mill waste water valorisation in agriculture : Effects on the soil proprieties and barley yield
7/75	Antoine KARAM, Arnaud S. DE CONINCK and Alfred JAOUICH	Canada	Composted shrimp wastes and inorganic fertilizer for the improvement of copper-mine tailing fertility

7/76	Arati Poudel NEPAL, Yoki ASANO, Isao AKAGI, Daisuke TSHIMA, Chieko MURANAKA, Yasuhiro SUGIMOTO	Japan	Effect of the different composts on swiss-chard growth and soil quality
7/77	Pedro GONZALEZ, Rafaela ORDOÑEZ, Ignacio MARISCAL and Rafael ESPEJO	Spain	Economics of applications of sugar factory lime refuse in Mediterranean Ultisols
7/78	Annie ROBICHAUD, Noura ZIADI, Bernard GAGNON and Antoine KARAM	Canada	Soil fertility following repeated applications of paper mill biosolids and liming materials in Eastern Canada
7/79	Saida Ben GUIRAT, Nadhira Ben AISSA, Imen JAMAI, Ben HAMMOUDA and Tahar GUELLALI	Tunesia	Effect of land use on the depth distribution of different forms of carbon in semi arid region
7/80	Ebtisam K. HEIKAL	Egypt	Use of some organic compounds as soil conditioner and slow-release fertilizers to improve lettuce plant growth
7/81	Serkan İÇ and Coşkun GÜLSER	Turkey	Effects of rice husk dust application on some chemical and physical properties of different textural soils
7/82	Odunze A. C, Mando A., Jean, Amapu I. Y, Tarfa B. D., Yusuf, A ; Abu T. S, and Bello. H	Nigeria	Moisture Conservation and Fertilizer Use for Sustainable Cotton Production in the Sub humid Savanna Zones of Nigeria
7/83	Tugrul YAKUPOGLU and Nutullah OZDEMIR	Turkey	Influence of some organic amendment materials on total porosity of an eroded soil
7/84	Salwan AL-MALIKI, John SCULLION, Gareth GRIFFITH	UK	Dynamics of aggregate stability and biological bindings agents on restored open-cast coal soil
7/85	Eilín WALSH and Kevin P. MCDONNELL	Ireland	The effect of added organic matter on soil physical, chemical and biological properties:- a small scale experiment
7c: Biochar, ash amendments, nutrients, soil fertility development			
7/86	Hossein KHALEDIAN, Saber SHAHOE	Iran	Assessment of raindrops size distribution to natural precipitation in Kurdistan Province, Iran
7/87	Hossein KHALEDIAN, Saber SHAHOE	Iran	Relation of cs-137 fallout with annual precipitation in Northwestern Iran
7/88	Nele AMELOOT, David BUCHAN, Steven SLEUTEL, K.C. Das and Stefaan DE NEVE	Belgium	Biochar amendments change the nutrient cycles in Belgian loamy soils
7/89	Valério PITA, Ernesto VASCONCELOS, Fernanda CABRAL and Henrique M. RIBEIRO	Portugal	Effect of ash from sugarcane bagasse and wood co-combustion on soil properties and corn growth
7/90	L.S. AYENI, M.T. ADETUNJI and S. O. OJENIYI	Nigeria	Integrated application of cocoa pod ash and NPK fertilizer in maize production: Effect on soil and plant nutrients and yield

7/91	Cristina LÓPEZ- FANDO and Maria Teresa PARDO	Spain	Long-term tillage effects on a compacted Calcic Luvisoil in Central Spain. Changes in soil nutrient profile
7/92	David FANGUEIRO, Gonçalo De SOUSA, Ernesto, VASCONCELOS, Elizabeth DUARTE	Portugal	Influence of nitrogen content in soil solution on the potential nitrogen mineralization of organic residues
7/93	Rosane DA SILVA DIAS, Eva VIDAL VÁZQUEZ and Jorge PAZ-FERREIRO	Spain	Accumulation of phosphorus, copper and zinc from manure in a soil under conventional tillage
7/94	Vlado KOVACEVIC, Dragutin PETOSIC and Imre KADAR	Croatia	Impacts of ameliorative phosphorus fertilization on mobile cadmium status in soil
7/95	Noura ZIADI, Xianglan LI, Gilles BÉLANGER, Zucong CAI, AND hua XU	Canada	Cadmium concentration in wheat grain produced in Eastern Canada
7/96	Yusuke ARAKAWA, Katsumi YAMAMOTO	Japan	Improvement of soil fertility by flood fallowing for groundwater conservation on the middle stream of the Shirakawa river basin in Kumamoto
7/97	A.R.TRAG and Mushtaq A. WANI	India	Soil conservation measures for maintaining soil fertility and productivity in temperate valley of Kashmir
7/98	Sakda SUKVIBOON and Chalong TEPWITUKSAKIT	Thailand	Soil degradation and conservation in Thailand
Topic 8: Modelling soil fertility, productivity and conservation, some are included in topics 2 and 3			
8/99	Kaveh KHAKSAR; Manoochehr FARBOODI	Iran	Phosphorus fertilizer recommendation by adsorption isotherms in calcareous soils of Iran
8/100	Asma NAJAFIAN, Ali ABTAHI and Mostafa EMADI	Shiraz, Iran	Spatial variability of important soil characteristics in semiarid ecosystems, a case study in Marvdasht Plain, Southern Iran
8/101	Mostafa EMADI, Majid BAGHERNEJAD and Asma NAJAFIAN	Shiraz, Iran	Mapping soil salinity using cokriging method in Arsanjan Plain, Southern Iran
8/102	Asma NAJAFIAN, Ali ABTAHI and Mostafa EMADI	Shiraz Iran	Comparison between different interpolation methods for mapping selected soil fertility properties in Marvdasht Plain, Southern Iran
8/103	H. Mohamad ASGARI, F. TARNIAN and M. JAFARI	Iran	Investigating the spatial variability of soil pH in arid environment
8/104	Shabnam RATHORE and Prof. Dr. Karl STAHR	Germany	GIS application in soil and water data analysis, a case study in Southern Pakistan (Badin).
8/105	Oswaldo SALAZAR, Manuel CASANOVA and Thomas KÄTTERER	Chile	Modelling effects of agroforestry combined with water harvesting on soil fertility in the central zone of Chile: nitrogen and carbon dynamics

8/106	Piotr GRUBA, Wojciech BOSAK	Poland	Soils of new vineyard "Srebrna Góra" – modelled approach to further management
8/107	Gabriella MÁTHÉ-GÁSPÁR, Nándor FODOR, Péter CSATHÓ	Hungary	Modelling of yield and phosphorus content of Canola
8/108	Shamsollah AYOUBI, Mojtaba NOURUZI, Ahmad JALALIAN, and Hossein KHADEMI	Iran	Artificial neural network modelling to identify the most important soil and landscape attributes affecting rainfed wheat yield
8/109	Leyla HASSANI REZAEI	Iran	Quantitative assessment of linear sorghum response functions to combined salinity-urea
8/110	Krunoslav KARALIĆ, Domagoj RASTIJA, Brigita POPOVIĆ, Vlado KOVAČEVIĆ and Zdenko LONČARIĆ	Croatia	Assessment of liming impact on soil fertility
Topic 9: Soil changes and impacts by shift from use of soil fertility properties to soil productivity properties			
9/111	Nataliya RIDEY, Vita STROKAL, Nataliya BILYERA	Ukraine	Analysis of soil fertility criteria under formation of special primary products zones
9/112	Tofigh AHMADI, and .Vida SARAVI	Iran	The effects of the change of the usage of the forest lands into farms and residential areas on the physical and chemical characteristic of the soil in Royan district (North of Iran)
9/113	Tofigh AHMADI and Vida SARAVI	Iran	Determination of the condition of the existing food elements in soil and leaves of natural side of yew tree in North of Iran
9/114	Wieslaw SZULC	Poland	Influence of the long-term monoculture (from 1923) on the level of yield of potatoes and rye
9/115	Teodor RUSU, Petru GUS, Ileana BOGDAN, Paula Ioana MORARU, Adrian Ioan POP, Do-ina CLAPA, Mara Lucia SOP-TEREAN, Ioan PACURAR and Lavinia POP	Romania	Soil properties evolution influenced by soil usage and soil tillage system
9/116	Beata RUTKOWSKA, Wiesław SZULC, Stanisław MERCIK, Jan ŁABĘTOWICZ, Wojciech STĘPIEŃ	Poland	Fertility and productivity of the soil in the light of long-term fertilization experiments on the sandy soil in Skierniewice
9/117	Vijay sankar babu MALAYANUR and Rama krishna PA-RAMA.V.R.R	India	Impacts of organic farming on distribution of soil organic carbon and total nitrogen stocks under transitional zone of Karnataka, South India
9/118	Fernando DEL MORAL, Verónica GONZÁLEZ, Mariano SIMÓN, Inés GARCÍA, Juan Antonio SÁNCHEZ, Sergio DE HARO	Spain	Soil properties after ten years of organic vs conventional management in two greenhouses in Almería (se Spain)
9/119	Mostafa EMADI, Majid BAGHERNEJAD and Asma NA-JAFIAN	Iran	Changes in soil phosphorus fractions of virgin and cultivated Mollisols of southern Iran

9/120	Levent ATATANIR Gönül AYDIN and Alper YORULMAZ	Turkey	The determination of salt affected soils using satellite data and GIS in Soke plain
9/121	Hassan ETASAMI and A. KESHAVARZI	Iran	Effect of the developing salinity water on the quality of irrigation waters and soils physicochemical characteristics of pistachio cultivation of Sirjan Area
9/122	Gönül AYDIN, Levent ATATANIR and Alper YORULMAZ	Turkey	Risk Mapping for Boron Levels in Söke Plain, Aydin, Turkey
9/123	Matteo MOTA, Guillaume CAILLEAU, Michel ARAGNO, Eric VERRECCHIA	Swiss	Alkalisating of acid tropical soils: possible effects of the oxalate-carbonate pathway on soil fertility
Topic 10: Land management and policy requirements with respect to soil fertility and soil productivity , some are included in topics 1 and 7			
10/124	Jude ODHIAMBO and Anthony WHITBREAD	South Africa	An assessment of smallholder farming systems in semi-arid Vhembe district, Limpopo province, RSA: soil management, constraints and challenges
10/125	K.M. SHIVAKUMAR, Mavinakoppa S. NAGARAJA and Bhadravati V. CHAMPA and Vittal B. Kuligod	India	Agriculture on leased lands – are they sustainable? A case study on spices in India
10/126	Xiaobin WANG, Kuai DAI, Yan WANG, Quansheng ZHAO, Dianxiong CAI, W.B. HOOGMOED, U.D. PERDOK, O. OENEMA	China	Nutrient management adaptation for dry-land maize yields to long-term rainfall variability in China
10/127	Alper YORULMAZ, Levent ATATANIR and Gönül AYDIN	Turkey	Preparing the potential land use maps of Denizli Province soils
10/128	Hassan ETASAMI and A. KESHAVARZI	Iran	The survey of chemical and physical properties of under cultivation soils of Rayen region in the province of Kerman
10/129	Hassan ETASAMI, and A. KESHAVARZI	Iran	Evaluation of land qualitative suitability of gypsiferous soils for the important agro-nomic productions of the Bardsir area in Kerman Province, Iran
10/130	Abdollah Hassanzadeh GHORTTAPEH	Iran	Evaluation of auxiliary energy efficiency in pomegranate garden at Fars Province, Iran
Topic 11: Future perspective about the importance of soil fertility and soil productivity with respect of different domains of soil use , some are included in topic 9			
11/131	Christopher BROCK and Günter LEITHOLD	Germany	On the link between soil fertility and productivity in organic farming
11/132	Sofie F. KOSTANDI, Magdi F. SOLIMAN, W. MERBACH and H. BESCHOW	Egypt	Rhizosphere effects of maize hybrids and N forms on Cd bioavailability in a limed soil
Topic 12: Soil fertility and soil productivity under changing global conditions , included in topics 3, 5 and 6			

Topic 13: Prospect of soil fertility and soil productivity , included in topics 5, 6 and 9
Topic 14: Others about the thematic soil fertility – productivity , included in topics 3, 5, 6 and 7
Saturday, 20th March 2010
Tour Announcement Start 8:00 exactly in front of the Albrecht Daniel Thaer Hall, end about 18:30.
Use of sandy soils in the context of regional soil diversity and soil productivity Dear participants, welcome to Berlin. It is our pleasure to invite you on a tour of the area surrounding Berlin. Here we can introduce you to the landscape, soils and varied land uses of the area. We will visit a farm where the wide range of site factors that are typical for the region present a challenge as well as an opportunity to farm in a sustainable and competitive manner. Our route will take us into a relatively young landscape that was formed at the end of the Pleistocene after the thick glaciers that covered northern and central Europe melted. The Holocene, and with it soil development, began in the Berlin-Brandenburg region around 10,000 years ago. Wind and water erosion in addition to land use, which started around 2,600 years ago, continue to form and influence the landscape and soils up to this day. The area of interest lies in the State of Brandenburg around 50 km southwest of Berlin. We will begin at the conference location in the centre of Berlin. The drive to the first stop will give us the first opportunity to see the varied landscapes in Brandenburg. On the way we can observe vegetation and land use patterns resulting from geomorphological structures. Upon arriving in our area of interest, we will show 5 soil profiles within a relatively small area that represent typical sites for arable land, grassland and forest. For each profile, agronomic information for the crops cultivated including expected yield will be presented. In addition, the limitations for use resulting from site factors as well as the risks resulting from improper management practices will be discussed. The first two profiles are located on ground moraines, which are preferentially used as arable land in northern Germany. The plains of ground moraines are located 50 to 100 m above sea level and are made up of sandy to loamy glacial deposits with varying coarse fragment content. A sandy periglacial cover layer usually overlies the glacial till. Its thickness is a key factor determining the soil productivity. In Brandenburg's relatively dry climate, these sites are characterized by a water deficiency. The first profile represents one of the worst, the second one of the best cropping sites in the region. Both, however, are only considered moderately productive soils when seen on a national level. Profile number 3 and 4 are located in a depression within a wide valley called the "Berliner Urstromtal" formed by waters from glacial melt. The influence of ground water, regulated through a complex system of drainage ditches, is typical for this kind of site. Depending on the water table, mineral sandy soils or organic soils alternate, and are used as arable land or grassland respectively. Here we will look at an excessively drained sandy soil, which is usually suitable for cropping as well as an imperfectly drained organic soil, typical for grassland. Our tour ends at a site only suitable for forestry. Sand dunes were formed here as a result of deforestation and the resulting wind erosion that occurred around 200 to 400 years ago. Soil development took place in the dry and infertile eolian sand. At the first stop of our tour we visit the Teaching and Research station of the Faculty of Agriculture and Horticulture where information will be given about the long-term field experiments maintained here since more than 70 years. The other soil profiles presented are located on land farmed by the <i>Agrargenossenschaft Trebbin</i> . This farm is typical for the region in terms of size, crops and equipment. Here we will also be served lunch and beverages. Last but not least, a few organisational details: We will begin Saturday March 20 st , 2010 at 8:00 in the main building of the Faculty of Agriculture and

Horticulture at Invalidenstraße 42 and expect to return at 18:30. Lunch is planned for around 12:30 and is included in the fee for the tour.

Even though the tour will take place a day before the beginning of spring, we kindly ask you to dress for cold and wet weather. Please also remember appropriate footwear for the wet sites.