

Tuesday 15th March 17:30 – 18:30

Poster Groups (Parallel Sessions)

– author (speaker) / title –

	Session I	Session I
	PS I-1: Modelling environmental impacts Chair: Allard de Wit	PS I-2: Modelling non-main crops Chair: Jon Lizaso
1	Kupisch / Analysis and modelling of spatio-temporal patterns of CO ₂ and H ₂ O fluxes in relation to crop growth under field conditions	Roux / Delimiting the validity domain of a crop model with uncertainty analysis: the case of a vineyard model with a run-off module
2	Zare / Assessment of DSSAT and WOFOST sensitivity to temperature derived from AgMERRA	Weymann / Describing dry matter and N distribution of winter oilseed rape by organ specific approaches to improve simulated crop response to N deficiency
3	Heinlein / Determination of the water balance of maize plants on lysimeters by means of sap flow measurement and plant growth models	Moualeu Ngangue / Influence of stomatal behaviour on cucumber leaf water-use efficiency
4	Malik / DSSAT model as a tool for water and nitrogen management in intensive irrigated areas: I-Calibration and validation	Moreno Cadena (Ramirez) / Cassava: an indeterminate challenge
5	Luig / Towards simple model for winter wheat's grain filling dynamics considering heat effects	Khasanah / Intercropping oil palm: a tree-soil-crop interactions model
6	Wegehenkel / The effect of using different soil hydraulic parameters on the outputs of a simple crop growth model	Sesermann / Modelling of the tree yield in an alley cropping system
7	Jabloun / Sensitivity analysis of the DAISY model applied to winter wheat - summer maize rotation in the North China Plain	Qian / Adapting the CSM-CROPGRO-Canola model for spring canola in Eastern Canada
8	Gou / Potential growth of wheat-maize intercrop: model description and Bayesian parameter estimation	Dias (Sentelhas) / Performance of DSSAT-CANEGRO and FAO-Agroecological Zone Models under operational Brazilian sugarcane conditions
9	Klein / Modelling energy fluxes in heterogeneous cropland employing a mosaic approach	Costa (Fraga) / Calibration of the STICS crop model for the Portuguese grapevines
10	Kroes / Disentangle mechanisms of nitrogen and water availability on soybean yields	

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	Session II	Session IV
	PS II-1: Model applications for breeding Chair: Xinyou Yin	PS IV-1: Modelling crops and responses to stresses Chair: Jørgen E. Olesen
1	Loison / Design of African rainfed cotton ideotypes using DSSAT CROPGRO-Cotton	Osborne / Crops and ozone: modern soybean cultivars are more sensitive to ozone pollution than older cultivars, and sensitivity depends on geographic location
2	Manderscheid / Effects of free air CO ₂ enrichment and drought on canopy development and biomass production of different sorghum genotypes as compared to maize	Rötter (Höhn) / Analysis of crop yield variability and yield gaps for maize and wheat in diverse climatic zones
3	Ababaei / Typologies of drought and heat stress scenarios at European level for wheat	Savary (Willoquet) / "Simulation Modelling in Botanical Epidemiology and Crop Loss Analysis": an online course in The Plant Health Instructor, the APSnet Education Center
4	Herrera / Genotypic predictions and environmental characterization by coupling climate suitability and ridge regression-BLUP models	Nogueira Júnior / Simulation modelling of yield losses caused by multiple diseases in American grapevine (<i>Vitis labrusca</i> L.)
5	de Swaef / Identifiability analysis of a grass growth model	Artru / Do crop models based on daily incoming global light efficiently simulate crop growth under dynamic shade?
6	Chenu / Heat, frost and drought – what are the trends?	Feike / Adapting the CSM-CROPGRO to simulate Chinese cabbage
7	Chenu / Using crop modeling to get better field data	Dier / Interactive effects of CO ₂ enrichment and N fertilization on grain N acquisition and grain protein concentration in wheat
8		Kamali (Zand-Parsa) / Estimation of sugar beet yield and its partitioning under differently applied water and nitrogen
9		Mechiche-Alami / Climate impact response surface analysis for maize in Africa
10		Sharif / Sensitivity of winter oilseed rape production in Denmark towards climate change using regression techniques
11		Liu, L. (Tang) / Does rising temperature reduce the winter wheat production?

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	Session III	Session III
	PS III-1: Risk and uncertainty Chair: Anne Gobin	PS III-2: Weather and extremes Chair: tbc
1	Porwollik / Uncertainty of crop yield aggregations	Schauberger / Understanding the effect of extreme heat on crop yields
2	Marin / A stochastic model for simulating sugarcane production and uncertainty	Mills / Quantifying the threat to global wheat production and quality from ozone pollution
3	Mulder / Uncertainty and global sensitivity analysis of actual evapotranspiration and crop yield using SWAP-WOFOST	Caubel (de Noblet) / When and what meteorological stresses will maize and winter wheat crops meet in the future in France?
4	Masikati (Descheemaeker)/ Impacts of climate change: a sensitivity analysis to understand the role of soil fertility and water on maize production in the face of climate uncertainty, northwest Zimbabwe	Kersebaum / Modelling cover crop effects in a corn-soybean rotation in Iowa on water and nitrogen tile drain fluxes
5	Traore / Use of crop modelling to assess climate risk management for family food self-sufficiency in southern Mali	Gaydon / Increasing Boro rice production in saline coastal Bangladesh
6	Bregaglio / Identifying trends and sources of uncertainty in potential rice productions under climate change in Mediterranean countries	Kim / Drivers of crop productivity and resource use efficiencies in apple between western and eastern states
7	Cammarano / Uncertainties of different weather data input on three multi-models simulations of yield and water use	Ceglar (de Sanctis)/ Detecting meteorological drivers behind inter-annual crop yield variability in France
8	Parker / Simulated wheat yield sensitivity to root biomass partitioning under projected climate	
9	Vellingiri / Evaluation of cascading uncertainty in climate and crop models in assessing the impact of climate change on rice	
10	Deryng / Assessing crop model performance in a critical food insecure region, southern Africa, for improved modelling of climate risks to food security	
	Session III	
	PS III-3: Scaling and spatial variability Chair: Henrik Eckersten	
1	Eyshi Rezaei / Data aggregation does not reduce signals of heat and drought stress in large area yield simulations	
2	Baranowski / Multifractal properties of spatially aggregated meteorological data – a regional study	
3	Coucheney (Eckersten) / The role of spatial pattern of soil types for data aggregation effects in crop modelling	
4	Christy / Extrapolating plot-based canola trait response across landscapes	
5	Ruget / Regional variability of the climate change effect on grassland production	
6	Yao / Evaluating the potential of rice production in Taiwan by using DSSAT and the statistical downscaling model to generate future climate data	

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Poster Groups (Parallel Sessions)

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	Session I	Session II
	PS I-3: Modelling phenology and growth Chair: Michael Dingkuhn	PS II-2: Model enhancement for breeding Chair: Melanie Correll
1	Ruget / Parameterization of a crop model using a regional agronomical database: rice in Camargue with STICS	Singels / Modelling impacts of stomatal drought sensitivity and root growth rate on sugarcane yield
2	Zhou / Simulation of potato dry matter production under split-N fertigation and sandy soil conditions	Singh (van Oosterom) / Quantification of high temperature risks and potential effects on sorghum productivity in eastern Australia
3	Peltzer / Comparison and validation of three soybean phenology models	Soufizadeh / Developing algorithms for modelling the dynamics of N balance in maize in a gene-to-phenotype context
4	Lana / Effect of different levels of calibration in rotation schemes simulated in five European sites in a multi-model approach	Bris (Soenen) / “CHN”: a crop model to add value to phenotyping and approach genetic variation for RUE and WUE
5	Berger / Wheat post-anthesis nitrogen uptake, grain yield and protein content simulated with PYG model	Casadebeig (Debaeke) / A model-based approach to assist variety assessment in sunflower crop
6	Azevedo / Potential substitution of mineral P fertilizer by manure: EPIC development and implementation	de Sanctis / Heat waves during number of grain determination reduce yield in different cultivars of durum wheat
7	Yun (Kim) / Improving phenology predictions with a multi-model ensemble	Chenu / Using crop modeling to get better field data
8	Ferrise / Fuzzy-logic based multi-site crop model evaluation in Europe	

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	Session III	Session III
	PS III-4: Yield gap analysis Chair: Paulo César Sentelhas	PS III-5: Climate change Impact Assessment Chair: Phillip Parker
1	Sinabell / Yield potentials and yield gaps of soybeans in Austria – a biophysical and economic assessment	Singh / Mapping rainfed rice cultivation under future climate change scenarios
2	Luetzger (Feike) / Agro-climatic indices explaining yield variations in major crops in Germany	Büker / Variation in rain-fed rice yields in India under a changing climate
3	Chen / Characterizing the yield variability, yield gaps and yield loss risk of winter wheat in northern China	Durand / Integrated assessment of climate change impacts on crop productivity and poverty rates: case study of the Bethlehem district in South Africa
4	Lilley / Estimating canola yield gaps in Australia	Mtongori / Impacts of climate change and variability on yields for selected maize cultivars grown in southern Tanzania
5	Soufizade (Mirebrahim) / Quantification of forage maize yield gap in the Alborz province of Iran by help of crop simulation modelling	Rusinamhodzi (Corbeels) / Challenges of modelling climate change impact on smallholder agricultural systems in Africa
6	Manevski / Can crop yields be doubled and environmental impact halved in the Danish agriculture?	Ahmadi / Monitoring & prediction of climate changes for maize yield using the AQUACROP model and CMIP5 data
7	Meister / Desert agricultural systems at the Early Bronze Age settlement of Jawa, northern Jordan – efficiency & potential crop yields	Ebrahimi / Modelling the sowing date of winter wheat in response to climate change for eastern Austria
8	Monteiro / Sugarcane spatial variability in Brazil: potential, best farmer's and actual yields	Chaki (Gaydon) / Productivity of dry season rice as affected by climate scenarios and its adaptations in Bangladesh
9	Gornott / Yield gap analysis for Tanzania - the impact of water supply and fertilization on maize yields	Fraga / Modelling climate change impacts for grapevine yield in Europe using the STICS crop model
10		Srivastava / Climate change impact under climate scenarios on maize yield in Ghana
11		Ahmed (Stöckle) / Assessment of climate change impacts on winter wheat in the US Pacific Northwest using a multimodel ensemble approach

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	Session III	Session III
	PS III-6: Management options for climate change adaptation Chair: Margarita Ruiz-Ramos	PS III-7: Models, tools and decision support Chair: David Fleisher
1	Armas-Herrera (Beaudoin) / Modeling with STICS the effects of no-tillage vs. tillage in cropping systems under contrasting pedoclimatic conditions	Luedeling / Decision analysis principles can guide the modelling of complex agroforestry systems
2	Kirschbaum / Modelling changes in soil carbon stocks in New Zealand's grazed pastures in response to variations in management and environmental factors	Oosthuizen / Crop Critical Climate Threshold (CCCT) modelling as an alternative modelling technique to determine the financial impact of climate change on crop yield and quality – a South African case-study
3	Topaj / Comparative model analysis of various sparing measures intended to crop production sustainability by "APEX-AGROTOOL" simulation system	Mirschel / YIELDSTAT – a regional yield model for agricultural crops applicable for East-Germany
4	Vermue / Climate-cafe: first results of the cropping systems simulations with the model STICS	Li / Integrating C4 photosynthesis into the ORYZA crop simulation model for virtual assessment of C4 rice
5	Constantin / Impact of maize management variability modelled as decision rules on yield and drainage at the regional scale	Kadiyala / Linking satellite imagery and crop modelling for integrated assessment of climate change impacts on chickpea yields in Southern India
6	Heinemann / Environmental characterization for improving breeding strategies in Brazilian rainfed drybean	Battisti / Comparison of five soybean crop growth models for yield estimation in southern Brazil
7	Onawumi / Site-specific fertilizer recommendation for maize production in the transition zone of Ghana	Shelia (Hoogenboom) / CRAFT: A Multi-scale and multi-model gridded framework for running crop simulation models
8	Archontoulis / In-season forecast of crop yields, soil water-nitrogen, and weather using APSIM and WRF models in Iowa, USA	Fodor / AGRAGiS: Extending the NAGiS database within the agriculture sector
9	Tribouillois (Constantin) / Simulation of ecosystem services of nitrogen management produced by bispecific mixtures of cover crops using the STICS soil-crop model	Santos (Fraga) / Modelling climate change impacts on grapevine phenology in Portugal: a statistical approach
10	van Oort / Intensification options for rice-based systems in Senegal	Potopová / CROPGRO-Tomato model for simulated growth parameters of field-grown tomato in the Elbe lowland conditions
11	Blazy / A modelling approach for assessing environmental and economic impacts of agri-environmental schemes to enhance soil C sequestration and reduce pollution risks	Sharp / Application of a systems model to spatially complex irrigated agricultural systems

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Session IV	
PS IV-2: Integrating crop, soil, climate and management	
Chair: Marcello Donatelli	
1	de Noblet / Modelling the impacts of climate change on agrosystems' functioning: how can we make the best use of both large-scale vegetation and plot-scale process-oriented models?
2	Buis / Multicriteria evaluation of the STICS soil-crop model and implementation of an automated evaluation system
3	Stella / Development of a modelling solution targeting the simulation of rice cropping system: the role of model composition
4	Danuso / An ontology for cropping system data management and modelling, based on system dynamics principles
5	Kim / Reengineering of the CERES-Rice model for facilitation of parallel crop yield simulation using the CORDEX data
6	Auzoux / ECOFI: a generic agronomic database to facilitate analysis and crop modelling
7	Mashaba / Investigating the influence of temperature variability on wheat in Bloemfontein using Landsat 8 data
8	Topp / Spring barley mixtures – do they outperform single varieties?
9	Dumont / Crop yields, soil organic carbon and soil nitrogen content change under climate change
10	Mehdi / Does crop type matter for simulating water quality?
11	Yang / Simulation of real-time nitrogen leaching for better crop nitrogen fertilizer management
12	Bennetzen (Porter) / Identity-based analysis of GHG emissions from agriculture
13	Haas / Responses of soil nitrous oxide emissions and nitrate leaching on climate, soil and management input data aggregation: a biogeochemistry model ensemble study