Poster Programme

Poster Session 1

Odd numbered posters - Sunday 26 March - *15:50 – 16:20 & 18:25 – 18:55*
Even numbered posters – Sunday 26 March – 18:55 – 19:25 & Monday 27 March - *10:45 – 11:15*

[P1.001]	**Irrigation scheduling for water saving and salinity control in horticulture in semi-arid areas: A case study from the Lower Cheliff plain (Algeria)** N. Adelkrim*[1], T. Hartani[2], F. Visconti[3], J. De Paz[3], A. Douaoui[2], *[1]University Hassiba Benbouali of Chlef, Algeria, [2]University Center Morsli Abdallah, Algeria, [3]Instituto Valenciano de Investigaciones Agrarias, Spain*
[P1.002]	**Modeling cross-scale interactions among climate, hydrology, and agriculture** F. Chen*[1], X. Liu[2], M. Baralge[1], A. Mahalov[3], D. Niyogi[2], *[1]National Center for Atmospheric Research, USA, [2]Purdue University, USA, [3]Arizona State University, USA*
[P1.003]	**The case of conservation agriculture as a climate change adaptation measure for small-scale farmers in kalomo district of zambia** A.N. Somanje*[1], O. Crespo[1,2], *[1]Ministry of Agriculture, Zambia, [2]University of Cape Town, South Africa*
[P1.004]	**Halophytes plant diet from Algerian South Eastern arid aereas impact on camel milk indigenous lactic flora evolution** A. Meribai*, A. Bensoltane, *Bordj Bou Arreridj University, Algeria*
[P1.005]	**Promoting wide scale adoption of sixty seven days-improved cowpea varieties for mitigating the effect of climate change on cowpea production in northern Nigeria** N. Abdu*[1], A.I. Gatawa[2], T. Hamza[3], M.S. Muhammed[4], A. Kamara[5], S. Ncho[6], O. Coulibaly[6], *[1]Ahmadu Bello University, Nigeria, [2]Sokoto State Agricultural Development Project, Nigeria, [3]Katsina State Agricultural and Rural Development Authority, Nigeria, [4]Kano State Agricultural and Rural Development Authority, Nigeria, [5]International Institute for Tropical Agriculture, Nigeria, [6]International Institute for Tropical Agriculture, Ghana*
[P1.006]	**The first study of rhizobacteria isolated from Algerian Argan and his impact on wheat germination and growth** M. Medjahed*[1], A. Noui[1], A. Merouane[1], A. Saadi[1], *[1]University Center Nour Bachir, Algeria, [2]Hassiba Benbouali University of Chlef, Algeria*
[P1.007]	**Microbial screening of a disease ravaged tomato field in Apètè, Ibadan, Nigeria** P.M. Etaware*[1], O.J. Oyetunji[1], E.U. Etaware[2], A.D. Adedeji[1], A.C. Odebode[1], *[1]University of Ibadan, Nigeria, [2]Yaba College of Technology, Nigeria*
[P1.009]	**Genetic variability, yield and functional response of lentil landrace "La Manchuela" during a dry spring as compared with those of two commercial accessions** M.A. Escolano-Tercero[1], M.A. Guevara[2], M.D. Vélez[2], N. de María[2], L. Diaz[2], R. Sánchez-Vioque[1,3], A. Sánchez-Virosta*[1], M.T. Cervera[2], D. Sánchez-Gómez[1], *[1]Centro de Investigación Agroforestal de Albaladejito (CIAF), Spain, [2]Instituto Nacional de Investigaciones Agrarias (INIA), Spain, [3]INCRECYT. Fundación Parque Científico y Tecnológico de Castilla-La Manch, Spain*
[P1.010]	**The risk evaluation and copula-based insurance pricing for crop revenue -- A case study of five major wheat producing provinces in China** S.F. Luo, C.F. Li, R.H. Yang*, *China Agricultural University, China*
[P1.011]	**Adoption of variable rate nitrogen application by EU farmers and the potential for mitigating greenhouse gas (GHG) emissions** M. Gómez-Barbero, I. Soto-Embodas, B. Sanchez, E. Rodriguez-Cerezo*, *European Commission- Joint Research Center (JRC), Spain*
[P1.012]	**Elevated CO_2 atmospheric condition increasing the production of Brachiaria brizantha grass** A.L.A. Filho*[1], G.Z. Sakita[1], T.P.D. Silva[1], D. Dineshkumar[1], L.A. Faria[1], E.H. Ieda[1], R. Ghini[2], A.L. Abdalla[1], M.C. Piccolo[1], *[1]Centre for Nuclear Energy in Agriculture, University of São Paulo, Brazil, [2]Embrapa Environment, Brazil*
[P1.013]	**Identifying key drivers of tolerance to heat stress in wheat and the development of effective phenotyping methods** R.J. Thistlethwaite*, D.K.Y. Tan, R.M. Trethowan, *University of Sydney, Australia*
[P1.014]	**Effects of elevated CO_2 on stomatal conductance, biomass partitioning and yield of sugarcane grown in absence of soil water deficit** C. Malan[1], J. Baartman[1], J.M. Berner[1], A. Patton[2], N. Hoffman[2], A. Singels[2,3], P.D.R. van Heerden*[2,3], *[1]North-West University, South Africa, [2]South African Sugarcane Research Institute, South Africa, [3]University of Pretoria, South Africa*
[P1.015]	**Impact of climate change on crop diseases: Southern blight epidemic and the spread of Pythium and Fusarium root rots of common beans in Uganda** P. Paparu*[1], C. Mukankusi[2], F. Kato[2], C. Acam[2], J. Nakibuule[1], S. Nkalubo[1], *[1]National Crops Resources Research Institute-NaCRRI, Uganda, [2]Centro Internacional De Agricultura Tropical-CIAT, Uganda*

[P1.016]	**Weather instruments calibration as influence on diseases prediction in viticulture** F. Sanna*[1,3], A. Calvo[1,2], R. Deboli[2], A. Merlone[3], *[1]University of Turin, Italy, [2]IMAMOTER-CNR, Italy, [3]INRIM, Italy*
[P1.017]	**Experimental site for the meteorological parameters measurements in protected cultivation of a tomato cultivar** F. Sanna*[1,3], A. Calvo[3], R. Deboli[2], G. Coppa[1], *[1]University of Turin, Italy, [2]IMAMOTER-CNR, Italy, [3]INRIM, Italy*
[P1.018]	**Effect of climate variables on yield and yield variability of rice in different agro-ecological regions of Nepal: A panel data analysis** N.P. Joshi*, L. Piya, *Hiroshima University, Japan*
[P1.019]	**Global climate change and smallholder agriculture: Improving the impact of innovations in agronomic practices** P.N. Jellason*[1,2], R.N. Baines[1], J.S. Conway[1], *[1]Royal Agricultural University, UK, [2]National Biotechnology Development Agency, Nigeria*
[P1.020]	**Acclimatization of Mung bean (*Vigna radiata* L.) to Arid Ecosystem of Saudi Arabia** A. Alderfasi*, A. Ahmad, M. Selim, *King Saud University, Saudi Arabia*
[P1.021]	**Antioxidant and antitumoral properties of different grapevine (Vitis vinífera L.) cv. Tempranillo clone leaves modulated by mycorrhizal inoculation under elevated temperature** N. Torres*[1], D. Plano[1,2], I. Encío[3], M.C. Antolín[1], C. Sanmartin[1,2], N. Goicoechea[1], *[1]Universidad de Navarra, Spain, [2]Instituto de Investigación Sanitaria de Navarra (IdiSNA), Spain, [3]Universidad Pública de Navarra, Spain*
[P1.022]	**Direct effects of elevated carbon dioxide on a mesic C4 grassland** C.E. Owensby, *Kansas State University, USA*
[P1.023]	**How rising temperatures would be detrimental for summer and winter-season food legume crops?** H. Nayyar*[1], P. Gaur[2], S. Kumar[3], S. Singh[4], H. Bindumadhava[5], R.M. Nair[5], P.V.V. Prasad[6], K.H.M. Siddique[7], *[1]Panjab University, India, [2]ICRISAT, India, [3]ICARDA, Morocco, [4]P.A.U., India, [5]World Vegetable Research Center, India, [6]Kansas State University, USA, [7]UWA institute of Agriculture, Australia*
[P1.024]	**Using rainfall variability and global indices to estimate the effects of El Nino occurrence on agriculture in Southern Java, Indonesia** B.D.A. Nugroho*, M. Silitonga, *Gadjah Mada University, Indonesia*
[P1.025]	**Climate change and pre-harvest aflatoxin contamination** M.K. Gilbert*[1], B.M. Mack[1], D. Bhatnagar[1], A. Medina[3], G. Obrian[2], G. Payne[2], N. Magan[3], *[1]United States Dept. of Agriculture, USA, [2]North Carolina State University, USA, [3]Cranfield University, UK*
[P1.026]	**Chemical profile of organs of sorghum plants grown under hydric stress and elevated carbon dioxide** C. Palacios*[1], A. De Souza[1], M. Buckeridge[1], A. Salatino[1], *[1]University of São Paulo, Brazil, [2]University of Illinois, USA*
[P1.027]	**Increasing sensitivity of maize yields to water under climate change from 1980s to 2000s** Q. Meng*[1], X. Chen[1], D. Lobell[2], Z. Cui[1], Y. Zhang[2], H. Yang[4], F. Zhang[1], *[1]China Agricultural University, China, [2]Stanford University, USA, [3]Chinese Academy of Meteorological Sciences, China, [4]University of Nebraska-Lincoln, USA*
[P1.028]	**Understanding the potential yield and yield gap in Chinese wheat production** B. Liu*, L. Wu, X. Chen, Q. Meng, *China Agricultural University, China*
[P1.029]	**Drought and low soil fertility tolerance in groundnut for improving productivity and resilience to climate change** F. Hamidou*[1,2], M. Heynikoye[1,2], O. Halilou[1,2], V. Vadez[3], *[1]Sahelian Center, Niger, [2]University Abdou Moumouni, Niger, [3]International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India*
[P1.030]	**Physiological impact of drought stress on cultivated wheat plants Triticum aestivum L. and Triticum durum L. growth and metabolism** N. Al-Quraan*, Z. Al-Ajlouni, H. Swid, N. Al-Daken, A. Al-Ghzawi, *Jordan University of Science and Technology, Jordan*
[P1.031]	**Aegilops biuncilais as a potential gene source for improving drought tolerance of wheat** E. Darko*, M. Megyeri, I. Molnár, *Hungarian Academy of Sciences, Hungary*
[P1.032]	**Climate change threatens Tunisia's fruit and nuts** H. Benmoussa*[1,3], E. Luedeling[2], M. Ghrab[3], M. Ben Mimoun[1], *[1]Institut National Agronomique de Tunisie, Tunisia, [2]World Agroforestry Centre (ICRAF) and Center for Development Research (ZEF), Germany, [3]Institut de l'Olivier, Tunisia*
[P1.033]	**New insights into climate change impacts on winegrape yields in Europe through dynamic modelling** H. Fraga[1], I.G. de Cortázar Atauri[2], A.C. Malheiro[1], J.A. Santos*[1], *[1]Universidade de Trás-os-Montes e Alto Douro, Portugal, [2]French National Institute for Agricultural Research, France*
[P1.034]	**Effect of rare earth elements (REEs) on the growth and physiological activities of some agricultural crops** D. Kar*[1], B. Pattnaik[1], N.K. Dhal[2], P.K. Pattanaik[3], M.K. Panda[1], *[1]Siksha O Anusandhan University, India, [2]Institute of Minerals and Materials Technology, India, [3]Orissa University of Agriculture and Technology, India*

[P1.035]	**Indonesia under increased agricultural uncertainty: The need of adopting a more prepared agriculture and food policy in responding to climate change** F.L. Benu*, I.W. Mudita, *Nusa Cendana University, Indonesia*
[P1.036]	**The application of Biochar in soybean farms for carbon sequestration in a rain shadow area in thailand** J. Yooyen*, S. Wijitkosum, T. Sriburi, *Chulalongkorn University, Thailand*
[P1.037]	**Rational exploitation system of fibrous waste from sugarcane for reducing emissions to the atmosphere** D.I.L.G. Lopez*[1], J.A.L. Correa[1], M.E.S. Pardo[2], A.M.T. Huerta[1], *[1]Instituto Politecnico Nacional-CICATA-Altamira-, Mexico, [2]Instituto Politcnico Naciona ENCB ZACATENCO, Mexico*
[P1.038]	**Multi-species grassland mixtures enhance yields across temporal scales despite simulated drought** J.A. Finn*[1], M. Suter[2], E. Haughey[1,3], D. Hofer[2], A. Lüscher[2], *[1]Teagasc, Ireland, [2]Institute for Sustainability Sciences, Switzerland, [3]UCD, Ireland*
[P1.039]	**Effect of drought on seed development and subsequent longevity of rice cv. gleva** S.M.A. Rahman*, R.H. Ellis, *Reading University, UK*
[P1.040]	**Comparison of heat and chill accumulation models for temperate fruit trees in Portugal in a climate change context** J.A. Santos*, R. Costa, H. Fraga, *UTAD, Portugal*
[P1.041]	**Validating the role of African indigenous vegetables for food and nutrition security in Uganda** B. Bua*, C. Onang, *Kyambogo University, Uganda*
[P1.042]	**Elevated CO_2, warmer temperatures and soil water deficit affect plant growth, physiology and water use of cotton (*Gossypium hirsutum* L.)** K.J. Broughton*[1,2], M.P. Bange[1,2], R.A. Duursma[3], P. Payton[4], R.A. Smith[3], D.K.Y. Tan[2], D.T. Tissue[3], *[1]CSIRO, Australia, [2]University of Sydney, Australia, [3]Western Sydney University, Australia, [4]United States Department of Agriculture, USA*
[P1.043]	**Interactive effect of advanced rice mutants across diverse environments on yield in Malaysia** M.Y. Rafii*[1], Y. Oladosu[1], N. Abdullah[1], G. Hussin[2], A. Ramli[2], A.R. Harun[3], *[1]Universiti Putra Malaysia, Malaysia, [2]Malaysian Agriculture Research and Development Institute, Malaysia, [3]Malaysian Nuclear Agency, Malaysia*
[P1.044]	**The role of climate change on (Gladiolus segetum) population** R. Majd*[1], H. Mohammaddoust[1], M.T. Alebrahim[1], *[1]University of Mohaghegh Ardabili, Iran, [2]Ardabil.agri-jahad, Iran*
[P1.045]	**The impact of climate change on gene silencing in weed science** M.T. Alebrahim*, R. Zangoueinejad, *University of Mohaghegh Ardabili, Iran*
[P1.046]	**No further stimulation of wheat yield by CO^2 above 600 ppm?** M.C. Broberg*[1], P. Högy[2], H. Pleijel[1], *[1]University of Gothenburg, Sweden, [2]University of Hohenheim, Germany*
[P1.047]	**Effect of foliar application of botanic extracts in tomato plants grown under salt stress conditions** M.C. Martí*, T. González, A. Sánchez, J.D. Jordá, M. Cerdán, *University of Alicante, Spain*
[P1.048]	**Responsiveness of durum wheat to mycorrhizal inoculation under different environmental scenarios** I. Garmendia[1], Y. Gogorcena[2], I. Aranjuelo*[3], N. Goicoechea[4], *[1]Universidad de Alicante, Spain, [2]Consejo Superior de Investigaciones Científicas (CSIC), Spain, [3]Universidad Pública de Navarra-CSIC-Gobierno de Navarra, Spain, [4]Universidad de Navarra, Spain*
[P1.049]	**Crop nitrogen response to CO_2 in models: A need or a no?** E. Vanuytrecht*, J. Diels, *KU Leuven, Belgium*
[P1.050]	**Yield developments in Bavaria as a basis for future yield predictions** S. Yildirim*, U. Schmidhalter, K. Heil, C. Jasper, *Technical University Munich, Germany*
[P1.051]	**Microdosing with fertilizers: A viable option for crop production intensification under flood-recession cropping** M. Chimweta*, I.W. Nyakudya, L. Jimu, *Bindura University of Science Education, Zimbabwe*
[P1.052]	**New insights on the effect of the microclimate on *C. arabica* yields and the implications for climate change adaptation** A.C.W. Craparo*[3,1], P.J.A. Van Asten[1], P. Laderach[2], L.T.P. Jassogne[1], S. Grab[3], *[1]International Institute of Tropical Agriculture, Uganda, [2]International Center for Tropical Agriculture, Vietnam, [3]University of Witwatersrand, South Africa*
[P1.053]	**Microclimatic impacts on C. arabica phenology under a climate warming scenario in Tanzania** A.C.W. Craparo*[1,2], P.J.A. Van Asten[2], P. Laderach[3], L.T.P. Jassogne[2], S. Grab[1], *[1]University of Witwatersrand, South Africa, [2]International Institute of Tropical Agriculture, Uganda, [3]International Center for Tropical Agriculture, Vietnam*
[P1.054]	**Artificial neural network modeling for optimization and prediction of essential oil yield in turmeric (*Curcuma longa* L.).** A. Kuanar*, A. Akbar, S. Nayak, *Siksha O Anusandhan University, India*
[P1.055]	**Understanding trade-offs for the adaptation of maize genotypes to climate change in New Zealand** E.I. Teixeira*[1], J. de Ruiter[1], P. Johnstone[1], A. Ausseil[2], A. Holmes[3], A. Daigneault[2], *[1]Plant & Food Research, New Zealand, [2]Landcare Research, New Zealand, [3]Foundation for Arable Research, New Zealand*

[P1.056]	**Influence of abiotic stress and molecular responses in functional properties of Capsicum annuum L. in greenhouse conditions** S.N. Jimenez-Garcia, M.A. Vazquez-Cruz, L. Mejia-Teniente, R.G. Guevara-Gonzalez, A.A. Feregrino-Perez*, *Universidad Autonoma de Queretaro, Mexico*
[P1.057]	**Combining crop physiology, breeding, socioeconomics and modelling to the targeting of genotypes to "wheat hotspots" in Mexico** G. Molero, J. Hellin*, K. Sonder, P. Alderman, *International Maize and Wheat Improvement Center (CIMMYT), Mexico*
[P1.058]	**Effect of high temperatures during the reproductive stage in faba bean (*Vicia faba* L.)** S. Badri[1], K.N. Adhikari*[1], B. Atwell[1,2], D.K.Y. Tan[1], *[1]The University of Sydney, Australia, [2]Macquarie University, Australia*
[P1.059]	**Raising rice productivity in flood-affected rainfed lowlands through tolerant varieties and conforming management** S. Singh*[1], A.K. Srivastava[1], U.P. Singh[2], S.K. Sarangi[3], U.S. Singh[1], *[1]International Rice Research Institute, India, [2]Banaras Hindu University, India, [3]Indian Council of Agricultural Research-Central Soil Salinity Research Institute Regional Research Station Canning Town, India*
[P1.060]	**Drought risk in the world granary, Thailand** C. Yi*[1], R. Park[2], *[1]Tohoku University, Japan, [2]R.Park and Associates Inc., Canada*
[P1.061]	**Variability in the yield response of different garlic (Allium sativum L.) cultivars to water availability in Castilla-La Mancha (Spain)** A. Sánchez-Virosta*[1], R. Sánchez-Vioque[1,2], D. Sánchez-Gómez[1], *[1]Instituto Regional de Investigación y Desarrollo Agroalimentario y Forestal de Castilla-La Mancha (IRIAF), Spain, [2]Albacete Science and Technology Park, Spain*
[P1.062]	**The effects of elevated CO_2 on leaf physiology of tomato plants grown at different N concentrations** M. Halpern*[1], U. Yermiyahu[1], A. Bar-Tal[2], D. Granot[2], *[1]Gilat Research Station, Israel, [2]ARO, Israel*
[P1.063]	**Integrated approach for food security by prevention stored grain losses in Israel** M. Kostyukovsky*[1], A. Trostanetsky[1], E. Quinn[1], M. Nega[1], A. Plonsky[2], *[1]ARO, The Volcani Center, Israel, [2]The Ministry of Agriculture and Rural Development, Israel*
[P1.064]	**Insecticidal effects of the naturally occurring sesquiterpene (-)-α-bisabolol on the Colorado potato beetle (Leptinotarsa decemlineata Say)** G.O. de Elguea-Culebras*[1,2], R. Sánchez-Vioque[2,3], D. Herraiz-Peñalver[2], O. Santana-Méridas[2,3], M.I. Berruga[1], *[1]ETSIAM-IDR (UCLM), Spain, [2]IRIAF, Spain, [3]INCRECYT, Spain*
[P1.065]	**New insights into plant growth-defence trade-off through transcriptomic profiling of the *res* (*restored cell structure by salinity*) tomato mutant** I. Albaladejo*, I. Egea, B. Morales, F.B. Flores, M.C. Bolarin, *CEBAS-CSIC, Spain*
[P1.066]	**Root plant layer water estimation using satellite: Application to an agricultural area in the Northwest of Spain** A. González-Zamora*, N. Sánchez, J. Martínez-Fernández, *University of Salamanca, Spain*
[P1.067]	**Satellite soil moisture as a basis for plant available water estimation and monitoring: application with SMOS and SMAP** A. González-Zamora*, N. Sánchez, J. Martínez-Fernández, *University of Salamanca, Spain*
[P1.068]	**Climate-cafe: Assessing European cropping systems resilience and adaptive capacity to climate change** A. Vermue*[1], M. Willaume[2], H. Hansen[3], M. Reckling[4], G. Carlsson[5], K. Topp[6], M. Hanegraaf[7], C. Lizarazo[8], J. Dewit[9], E. Justes[1], *[1]INRA, France, [2]ENSAT, France, [3]University of Roskilde, Denmark, [4]ZALF, Germany, [5]SLU, Sweden, [6]SRUC, UK, [7]NMI, The Netherlands, [8]University of Helsinki, Finland, [9]LBI, The Netherlands*
[P1.069]	**CO_2 assimilation, oxidative stress and biomass yield of Massai grass (*Panicum maximum* cv. Massai) as affected by sulfur and cadmium interaction: a pre-requisite study for agromining** J. Lavres*, F.H.S. Rabelo, M.L. Rossi, A.P. Martinelli, R.A. Azevedo, *University of Sao Paulo, Brazil*
[P1.070]	**Analysis of maize yield under climate change scenarios using STICS** C.Y. Yang*[1], H. Fraga[1], W.V. Ieperen[2], J.A. Santos[1], *[1]Universidade de Trás-os-Montes e Alto Douro, Portugal, [2]Wageningen University, The Netherlands*
[P1.071]	**Using human inedible resource locally available to improve animal productivity and reducing methane produced** D. Dineshkumar, A.L. Abdalla, A.S. Natel, G.Z. Sakita, L.L. Campos, P.M.T. Lima, A.L.A. Filho*, H. Louvandini, *University of Sao Paulo, Brazil*
[P1.072]	**Identifying heat tolerance adaptations in wild carrot germplasm** C.A. Bickler*, J.V. Müller, M.N. Nelson, *RBG Kew, UK*
[P1.073]	**The role of physicaly consistency of bias corrected RCM simulations using mechanistic crop models** A.C. Ceglar*, F.D. Dentener, A.T. Toreti, S.G. Galmarini, *Joint Research Centre, Italy*
[P1.074]	**Underlying molecular mechanisms of drought tolerance in the wild tomato species Solanum pennellii** I. Albaladejo, I. Egea*, B. Morales, M.C. Bolarin, F.B. Flores, *CEBAS-CSIC, Spain*

[P1.075]	**Limitations of earlier seeding as an adaptation measure to climate change for canola in Canada** B. Qian*, Q. Jing, G. Bélanger, J. Shang, T. Huffman, J. Liu, *Agriculture and Agri-Food Canada, Canada*
[P1.076]	**Does drought protect against ozone stress in European wheat only through reduced stomatal uptake?** S.A. Osborne*[1,2], G. Mills[1], F. Hayes[1], D. Gillies[2], H. Harmens[1], K. Sharps[1], L. Emberson[1], *[1]Centre for Ecology and Hydrology, UK, [2]Stockholm Environment Institute, UK*
[P1.077]	**Physiological responses of wheat to drought stress in the Texas High Plains** Q. Xue*[1], J.C. Rudd[1], S. Liu[1], T.H. Marek[1], K.E. Jessup[1], G. Pradhan[2], B. Hao[3], X. Hou[1], *[1]Texas A&M AgriLife Research, USA, [2]North Dakota State University, USA, [3]Xinxiang University, USA*
[P1.078]	**Climate change effects on U.S. Great Plains winter wheat yields** B-A. Stewart*[1], Q. Xue[2], S. Thapa[1], *[1]West Texas A&M University, USA, [2]Texas A&M AgriLife Research, USA*
[P1.079]	**Impact of elevated CO_2 on wheat productivity under heat stress** S.G. Chavan*[1], R.A. Duursma[1], S. Tausz-Posch[2], M. Tausz[2], O. Ghannoum[1], *[1]Hawkesbury Institute for Environment, Australia, [2]University of Melbourne, Australia*
[P1.080]	**Effect of day length and temperature on heading day, maturity and height in Nordic spring barley** M. Göransson*[1,2], J.H. Hallsson[1], A. Bjørnstad[2], M. Lillemo[2], *[1]Agricultural University of Iceland, Iceland, [2]Norwegian University of Life Sciences, Norway*
[P1.081]	**Early vigour in barley: Identifying traits and genetic controls to design resilient crops** C. Van-Lane*, I. Godwin, A. Borrell, L. Hickey, *The University of Queensland, Australia*
[P1.082]	**Potential edible vegetable crops from the harsh Western Cape coast climate of South Africa** C.P. Laubscher, *Cape Peninsula University of Technology, South Africa*
[P1.083]	**Metabolite profiles associated with drought tolerance on selected Indonesia rice cultivars** W. Widodo*, E. Oktaviani, T. Wahyuningsih, *Universitas Gadjah Mada, Indonesia*
[P1.084]	**Effect of three different water regimes on wheat yield under dry condition of Jordan** Z. Al-Ajlouni*[1], Y. BaniKhalaf[1,3], A. Al-Ghzawi[2], N. Al-Quraan[1], I. Musallam[1], *[1]Jordan University of Science and Technology, Jordan, [2]Hashemite University, Jordan, [3]National Center for Agricultural Research and Extension, Jordan*
[P1.085]	**Quantifying the impact of changes in atmospheric vapor pressure deficit on maize and soybean yields** K.M. Ferin*[1], J.E. Bagley[2], A. VanLoocke[1], *[1]Iowa State University, USA, [2]Lawrence Berkeley National Berkeley, USA*
[P1.086]	**An automated whole-canopy multi chamber system for live monitoring water use efficiency in sorghum** A. Fracasso*, S. Amaducci, *Università Cattolica del Sacro Cuore, Italy*
[P1.087]	**Historical improvement in drought adaptation of Australian wheat has coincided with changes in key physiological traits - Lessons for the future** K. Chenu, A. Fletcher, V. Vazquez-Carrasquer*, J. Christopher, *The University of Queensland, Australia*
[P1.088]	**Can arbuscular mycorrhizae increase tomato production under the current climate change scenario?** A. Fracasso*, S. Amaducci, *Università Cattolica del Sacro Cuore, Italy*
[P1.089]	**The response to drought stress of the forage legume sainfoin (Onobrychis viciifolia Scop.) depends on the plant's ontogenetic stage** C.S. Malisch[1,2], J-P. Salminen[4], R. Kölliker[1,2], M.T. Engström[4], D. Suter[1], B. Studer[2], A. Lüscher*[1], *[1]Agroscope, Switzerland, [2]Institute of Agricultural Sciences, Switzerland, [3]Kiel University, Germany, [4]University of Turku, Finland*
[P1.090]	**Beneficial soil microorganisms delivered via seed coating intended for a more sustainable and improved production of grain legumes under abiotic stresses** I. Rocha*[1], L. Pinto[2], R. Cambra[2], Y. Ma[1], G. Marques[1], A. Latr[1], M. Vosatka[1], H. Freitas[1], R. Oliveira[1], *[1]Centre for Functional Ecology, Portugal, [2]School of Allied Health Sciences, Portugal, [3]CITAB, Portugal, [4]Symbiom, Czech Republic, [5]Institute of Botany, Czech Republic*
[P1.091]	**Maize physiological responses to various water status regimes-drought severity and duration** Z.Z. Xu*, H. Song, *Chinese Academy of Sciences, China*
[P1.092]	**Evaluating the impact of biochar in mitigating greenhouse gases emission in dairy manure based corn silage cropping system in Newfoundland** W. Ashiq[1], W. Ali[1], M. Nadeem[2], J. Wu[1], L. Galagedara[1], V. Kavanagh[3], M. Cheema*[1], *[1]Memorial University of Newfoundland, Canada, [2]COMSATS Institute of Information Technology, Pakistan, [3]Government of NL, Canada*
[P1.093]	**Ozone effects on wheat productivity and implications for soil carbon sequestration** D. Pandey*[1,2], G. Mills[2], F. Hayes[2], L.D. Emberson[1], *[1]University of York, UK, [2]Centre for Ecology and Hydrology, UK*
[P1.094]	**Effect of biochar amendment on soil thermal properties and maize seedling emergence on a sandy soil in Zambia** E. Phiri*, N. Sakala, *University of Zambia, Zambia*
[P1.095]	**Flame weeding: New tool for weed management** S.K. Knezevic, *University of Nebraska, USA*

[P1.096]	**Distichlis palmeri: Saline paddy-style cultivation for perennial grain yield** C. Bresdin*, E.P. Glenn, *University of Arizona, USA*
[P1.097]	**Manipulating the root microbiome to increase crop production in a changing world climate** J.J. Germida*[1], B.L. Helgason[2], F.L. Walley[1], V. Vujanovic[1], S.D. Siciliano[1], *[1]University of Saskatchewan, Canada, [2]Agriculture and Agri-Food Canada, Canada*
[P1.098]	**Impact of soil parameterization on crop model simulations at national scale: Implications for climate change studies** D. Cammarano*, M. Rivington, *James Hutton Institute, UK*
[P1.099]	**Bio-fertilizers induce disease suppression by reshaping the soil microbiome** W. Xiong*[1], A. Jousset[1], Q-Y. Zhao[2], R. Li[1], Q-R. Shen[1], *[1]Nanjing Agricultural University, China, [2]Chinese Academy of Tropical Agricultural Science, China*
[P1.100]	**Development of methodology to evaluate the vulnerability of the agricultural sector to climate change** J. Uresti-Gil*, D. Uresti-Duran, H.D. Inurreta-Aguirre, *INIFAP, Mexico*
[P1.101]	**Effect of bovine urine in nitrous oxide fluxes on three pastures in piedmont plains of Llanos Orientales, Colombia** J.E. Garzón*[1], O. Pardo[2], V.S. Ciganda[3], E.A. Cárdenas[1], *[1]Universidad Nacional de Colombia, Colombia, [2]Corporación Colombiana de Investigación Agropecuaria, Colombia, [3]Instituto Nacional de Investigación Agropecuaria, Uruguay*
[P1.102]	**Optimization of the light source in the artificial plant cultivation** N. Nishimura*, Y. Arai, T. Kono, H. Gonome, J. Yamada, *Shibaura Institute of Technology, Japan*
[P1.103]	**What do meteorological indices tell us about a 30-year long-term tillage study?** C.A. Shapiro*, A. Shekhar, *University of Nebraska, USA*
[P1.104]	**The System of Rice Intensification (SRI): An eco-digital commons for sharing knowledge** L.H. Fisher, *Cornell University, USA*
[P1.105]	**Policy support through GIS-based targeting of mitigation options in rice production: the example of climatic suitability for altered water management in Vietnam** B.O. Sander*[1], R. Wassmann[1], L.K. Palao[1], A. Nelson[2], N.T. Hue[3], V.D. Quynh[3], M.V. Trinh[3], *[1]International Rice Research Institute, The Philippines, [2]University of Twente, The Netherlands, [3]Institute for Agricultural Environment, Vietnam*
[P1.106]	**Possible impact of climate change on sugar beet growth in Southwest Germany** P. Kremer*[1,2], H-J. Fuchs[1], C. Lang[2], *[1]Johannes Gutenberg-University, Germany, [2]Association of Sugar Beet Farmers in Hesse and Rhineland-Palatinate, Germany*
[P1.107]	**Photoperiod influences the growth of Phalaenopsis in a closed type plant factory system** H.R. An*, O.K. Kwon, P.H. Park, P.M. Park, Y.S. Baek, *National Institute of Horticultural & Herbal Science, Republic of Korea*
[P1.108]	**Three new Australian soybean varieties with high protein and traits that confer crop security and wider environmental adaptation** N.Y. Moore*[1], A.T. James[2], S.G. Morris[1], *[1]NSW Department of Primary Industries, Australia, [2]CSIRO, Australia*
[P1.109]	**Biophysical suitability for rain-fed maize production in West Africa under current and multi-model future climate projections** S.U. Ugbaje*, I.O. Odeh, T.F.A. Bishop, *The University of Sydney, Australia*
[P1.110]	**Projection of crop yield and nitrogen leaching under climate change in north China plain: Importance of model parameter uncertainty** M. Jabloun*[1,2], X. Li[3], J.E. Olesen[1,2], X. Zhang[3], F. Tao[3], C. Hu[3], *[1]Aarhus University, Denmark, [2]Sino-Danish Centre for Education and Research, Denmark, [3]Chinese Academy of Sciences, China*
[P1.111]	**Agro-ecological services within the cereal systems very dependant on the climate** A. Piquet*[1,2], S. Schoettel[1], M. Sartre[1], L. Thoulouze[1], C. Garcia[1], N. Baillot[1,2], C. Gouttebel[1], *[1]VetAgroSup, France, [2]UMR GDEC, France*
[P1.112]	**New agronomic practices for an old crop: Transforming subsistent farmers through a collaborative project involving governments, universities and financial institutions** F.L. Benu*[1], R. Rao[2], I.W. Mudita[1], *[1]Nusa Cendana University, Indonesia, [2]The University of Queensland, Australia*
[P1.113]	**Carbohydrate accumulation in last stem internode prevents the down-regulation of photosynthesis in barley plants** F. Torralbo*[1], R. Vicente[2,3], R. Morcuende[3], C. González-Murua[1], I. Aranjuelo[4], *[1]University of the Basque Country (UPV/EHU), Spain, [2]University of Barcelona, Spain, [3]IRNASA-CSIC, Spain, [4](IdAB)-CSIC-UPNA, Spain*
[P1.114]	**Modelling the regional evolution of frost damage on a winter crop with warming in a temperate climate** T. Castel*[1], C. Lecomte[2], Y. Richard[1], A. Larmure[1,2], *[1]CRC UMR Biogéosciences, France, [2]UMR Agroécologie, France*

[P1.115]	**Azodyn-Pea, a crop model to adapt pea crop to climate change** A. Larmure*[1], M. Bénézit[2], R. Trépos[3], C. Lecomte[1], M.H. Jeuffroy[2], *[1]UMR Agroécologie, France, [2]UMR Agronomie, France, [3]INRA UR MIAT, France*
[P1.116]	**Comparative metabolomics analysesin Brassica napus under the chromiumstress mitigated by exogenous reduced glutathione through RNA-Seq method** R.A. Gill*[1], B. Ali[1,2], S. Yang[1], C. Tong[3], S. Ali[1], T. Mwamba[1], Z. Na[1], M. Bizheng[1], W.J. Zhou[1], *[1]Zhejiang University, China, [2]Uinversity of Bonn, Germany, [3]Chinese Academy Of Agricultural Sciences, China*
[P1.117]	**Enhanced growth and flowering in Doritaenopsis Queen beer 'Mantefon' through CO_2 enrichment** Y.J. Kim*, A.R. Cho, D.L. Yun, S.J. Song, H.J. Kim, *Seoul Women's University, Republic of Korea*
[P1.118]	**Sustainable and environmental friendly rice cultivation systems in Europe (greenrice)** B.S. Segundo, *Centre for Research in Agricultural Genomics (CRAG) CSIC-IRTA-UAB-UB, Spain*
[P1.119]	**Modification of the grain dietary fiber content and composition of the bread wheat by the addition of chromosomes of Aegilops geniculata and Ae. biuncialis** I. Molnár*[1], E. Darko[1], A. Farkas[1], J. Dolezel[3], M. Molnár-Láng[1], P. Shewry[2], A. Lovegrove[2], M. Rakszegi[1], *[1]Hungarian Academy of Sciences, Hungary, [2]Rothamsted Research, UK, [3]Centre of the Region Haná for Biotechnological and Agricultural Research, Czech Republic*
[P1.120]	**Screening cowpea genotypes for higher bnf and grain yield under drought conditions** L. Munjonji*[1,2], K.K. Ayisi[2], G. Haesaert[1], P. Boeckx[1], *[1]Ghent University, Belgium, [2]University of Limpopo, South Africa*
[P1.121]	**Selection of Semi Dwarf and Dwarf Black Rice (*Oryza sativa* L. 'Cempo Ireng') Having Resistance to Brown Plant hopper [*Nilaparvata lugens* Stål (Hemiptera: Delphacidae)] Through Induced Mutation by Sodium Azide and Application of Methyl Jasmonate** K. Dewi*, H. Susilohadi, I. Yumiati, N. Nurria, *Universitas Gadjah Mada, Indonesia*
[P1.122]	**Impact of the climate change on the distribution of the grains of the spike in winter wheat** N. Baillot*[1,2], M. Sartre[1], L. Thoulouze[1], C. Garcia[1], J. Legouis[2], A. Piquet[1,2], *[1]VetAgroSup, France, [2]UMR GDEC, France*
[P1.123]	**Effect of salicylic acid on growth and biochemical parameter in rice (Oryza sativa L.) under cadmium stress** P. Singh, E.P. Lal*, *SHIATS, India*
[P1.124]	**Screening of plant growth promoting rhizobacteria against early blight of tomato (Solanum lycopersicum)** U. Maurya, E.P. Lal*, A.S. Singh, *SHIATS, India*
[P2.038]	**Understanding the unexplainable nature of an ecosystem service** A. Nielsen*[1], T. Reitan[1], T. Tscheulin[2], *[1]University of Oslo, Norway, [2]University of the Aegean, Greece*

Poster Session 2

Odd numbered posters - Monday 27 March - *14:00 – 14:30 & 15:30 – 16:00*
Even numbered posters - Tuesday 28 March - *10:45 – 11:15 & 14:00 – 14:30*

[P2.001]	**Carbon 13 and oxygen 18 as integrative measures of stomatal conductance in drought stressed triticale** L. Munjonji*[1,2], K.K. Ayisi[2], G. Haesaert[1], P. Boeckx[1], *[1]Ghent University, Belgium, [2]University of Limpopo, South Africa*
[P2.002]	**Modelling the temperature of paddy water using 1 km-grid square climate data to determine suitable areas and timing for rice cultivation** A. Maruyama*, H. Ohno, K. Sasaki, H. Nakagawa, T. Kuwagata, *National Agriculture and Food Research Organization, Japan*
[P2.003]	**Antioxidant properties of two garlic (Allium sativum L.) by-products: Scapes and peels** R. Sánchez-Vioque[1,2], D. Herraiz-Peñalver[1], G. Ortiz de Elguea-Culebras*[1,3], O. Santana-Méridas[1,2], *[1]Centro de Investigación Agroforestal de Albaladejito, Spain, [2]Castilla-La Mancha Science and Technology Park Foundation, Spain, [3]ETSIAM-IDR, Spain*
[P2.004]	**Impact of climate change on grain legumes and its implication on food and nutritional security in developing countries** S. Nedumaran*, P. Jyosthnaa, *International Crops Research Institute for the Semi-Arid Tropics, India*
[P2.005]	**The role of inter-conversion of scopoletin and scopolin in cassava post-harvest physiological deterioration (PPD)** A. Fathoni*[1,2], I.M. Zainuddin[2], E. Sudarmonowati[2], H. Vanderschuren[3], R. Scott[1], J.R. Beeching[1], *[1]University of Bath, UK, [2]Research Centre for Biotechnology-Indonesian Institute of Sciences, Indonesia, [3]University of Liège, Belgium*
[P2.006]	**Mechanisms of tolerance to abiotic stresses in Cynara cardunculus L.: New crop for a changing climate** H. Pappalrdo*[1,2], C. Genovese[1,2], C. Leonardi[1,2], V. Toscano[1], G. Puglia[1], S.A. Raccuia[1], *[1]Institute for Agricultural and Forest Systems, Italy, [2]University of Catania, Italy*
[P2.007]	**Applying bioherbicide for alleviating global warming potential** M.T. Alebrahim*[1], R. Fakhari[1], R. Majd[1], H.K. Khiavi[2], *[1]University of Mohaghegh Ardabili, Iran, [2]Plant Protection Research, Iran*

[P2.008]	**Resequencing of flowering genes in barley varieties adapted for Icelandic climate conditions** S. Shayestehaminzadeh[1], M. Göransson[1,2], H.S. Hilmarsson[1], J.H. Hallsson*[1], *[1]Agricultural University of Iceland, Iceland, [2]Norwegian University of Life Sciences, Norway*
[P2.009]	**An overview of barley breeding and variety trials in Iceland in the years 1987 - 2014** H.S. Hilmarsson*[1], M. Göransson[1], M. Lillemo[2], J.H. Hallsson[1], *[1]Agricultural University of Iceland, Iceland, [2]Norwegian University of Life Sciences, Norway*
[P2.010]	**Effect of growth stage on the response of phenolics to climate change: An example with rice exposed to elevated CO_2 from sowing till maturity** P. Goufo*, H. Trindade, *Universidade de Trás-os-Montes e Alto Douro, Portugal*
[P2.011]	**Impacts of climate-induced extreme events on rice production and their adaptation strategy based on agricultural insurance - A case study for Kochi Prefecture, Japan** M. Nishimori*[1], M. Sakata[2], K. Sassa[3], *[1]NARO Institute for Agro-Environmental Sciences, Japan, [2]Kochi Agricultural Research Center, Japan, [3]Kochi University, Japan*
[P2.012]	**Aluminium differential effects on major pin points in Al-tolerant and Al-sensitive rye seedlings** A. de Sousa*[1], H. AbdElgawad[2], A. Han[2], S. Selim[3], R. Fernandes[1], F. Figueiredo[1], P. Tamagnini[1], J. Teixeira[1], M. Matos[4], F. Fidalgo[1], *[1]University of Porto, Portugal, [2]University of Antwerp, Belgium, [3]Aljouf University, Saudi Arabia, [4]University of Trás-os-Montes e Alto Douro, Portugal*
[P2.013]	**One major rootstock QTL is controlling fruit yield of the grafted variety under salinity in a progeny derived from the Cleopatra mandarin** V. Raga, D. Roca, E.A. Carbonell, M.J. Asins*, *Instituto Valenciano de Investigaciones Agrarias, Spain*
[P2.014]	**Extreme events down-regulate the grassland biomass response to elevated carbon dioxide** N. Yuan*[1], G. Moser[1], C. Mueller[1,2], W.A. Obermeier[3], J. Bendix[3], J. Luterbacher[1], *[1]Justus Liebig University Giessen, Germany, [2]University College Dublin, Ireland, [3]Philipps-University of Marburg, Germany*
[P2.015]	**Soil CO_2emission depends on carbon inputs, soil tillage and wateravailability in olive groves under Mediterranean conditions** G. Koubouris*, N. Kourgialas, G. Doupis, C. Sergentani, N. Digalaki, G. Psarras, A. Papafilippaki, *Institute for Olive Tree, Subtropical Crops & Viticulture, Greece*
[P2.016]	**Phenotyping wheat seedling traits in contrasting temperature environments** V.V. Carrasquer*, K. Chenu, J.T. Christopher, *University of Queensland - QAAFI, Australia*
[P2.017]	**Food production in urban buildings. Energy performance of an integrated rooftop greenhouse (i-RTG) in a Mediterranean city for supporting food security** A. Nadal[1], P. Llorach-Massana[1,2], E. Cuerva[3], E. López-Capel[4], J. Montero[5], A. Alebaert[3], A. Josa[3], J. Rieradevall*[1], M. Royapoor[4], *[1]Universitat Autònoma de Barcelona, Spain, [2]ELISAVA Barcelona School of Design and Engineering, Spain, [3]Universitat Politècnica de Catalunya, Spain, [4]Newcastle University, UK, [5]Institute of Food and Agricultural Research, Spain*
[P2.018]	**Testing cowpea and pearl millet intercropping under extreme climate conditions in Telangana, India** W. Nelson*[1], M.P. Hoffmann[1], V. Vadez[2], R.P. Roetter[1], A.M. Whitbread[2], *[1]Georg-August University Goettingen, Department of Crop Sciences, Germany, [2]International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), India*
[P2.019]	**Alleviating effects of calcium and phosphorus on aluminium toxicity in Chinese fir seedlings and its mechanism** J.B. Zhang*, X.L. Xu, S.Z. Lin, B. Liu, *Fujian Agriculture and Forestry University, China*
[P2.020]	**Water stress in popcorn genotypes: Canopy temperature and root architecture system** S.H. Kamphorst*, V.J. Lima, A.T. Amaral Jr, K.F.M. Schmitt, J.T. Leite, B.L.S. Silva, E. Campostrini, *Northern Rio de Janeiro State University, Brazil*
[P2.021]	**Effects of reduced water supply on the nutritional quality of field grown vegetables at the Geisenheimer FACE site** C. Schlering*, H. Dietrich, J. Zinkernagel, *Hochschule Geisenheim University, Germany*
[P2.022]	**Identification of metabolic attributes of drought resistance in cowpea using metabolite profiling and osmotic adjustment analysis** H. Trindade, E. Rosa, P. Goufo*, *Universidade de Trás-os-Montes e Alto Douro, Portugal*
[P2.023]	**Water stress in popcorn genotypes: Grain yield and physiological attributes** A.T. Amaral Jr.*, S.H. Kamphorst, V.J. Lima, K.F.M. Schmitt, J.T. Leite, L.J.M. Guimarães, E. Campostrini, *Northern Rio de Janeiro State University, Brazil*
[P2.024]	**Cover crops potential to mitigate climate change effects in arable cropping systems** H. Tribouillois*, J. Constantin, E. Justes, *INRA, France*
[P2.025]	**Reviewing the impacts of climate change on the yields and nutritional quality of fruits and vegetables** H.L. Tuomisto*, P.F.D. Scheelbeek, F.A. Bird, A.D. Dangour, *London School of Hygiene & Tropical Medicine, UK*

[P2.026]	**Increasing the resilience of agricultural production with a changing climate in the Tennessee & Cumberland river basins in the Southeastern USA** F.R. Walker*[1], C.D. Clark[1], S. Cui[2], P. Gale[3], A. Kalyanapu[4], T. Papanicolaou[1], B. Waldron[5], *[1]University of Tennessse, USA, [2]Middle Tennessee State University, USA, [3]University of Tennessee, USA, [4]Tennesssee Technological University, USA, [5]University of Memphis, USA*
[P2.027]	**Drip irrigation as an innovative practice for enhancing wheat productivity and saving irrigation water** E. Dar*, A. Brar, *Punjab Agricultural University Ludhiana India, India*
[P2.028]	**Is a low-input strategy a sound strategy in a drying climate in the Wheatbelt of Western Australia?** I. Farre*[1], R. Kingwell[2,3], *[1]Department of Agriculture and Food Western Australia, Australia, [2]Australian Export Grains Innovation Centre, Australia, [3]University of Western Australia, Australia*
[P2.029]	**Water stress in popcorn genotypes: Green index and biomass production** V.J. Lima*, A.T. Amaral Jr., S.H. Kamphorst, K.F.M. Schmitt, J.T. Leite, E. Campostrini, *Northern Rio de Janeiro State University, Brazil*
[P2.030]	**Nitrous oxide emissions from a faba bean (*Vicia faba*) – barley (*Hordeum vulgare*) crop sequence in a boreal climate** C.I. Lizarazo*[1], R. Esfahani[1], A. Simojoki[1], F.L. Stoddard[1], *[1]University of Helsinki, Finland, [2]University of Helsinki, Finland, [3]University of Helsinki, Finland, [4]University of Helsinki, Finland*
[P2.031]	**Indicators for the evaluation of climate change adaptation measures of agriculture in Catalonia** R. Savé[1], I. Funes[1], X. Aranda*[1], C. Biel[1], F. de Herralde[1], B. Grau[1], G. Cantos[2], E. Pla[3], D. Pascual[3], S. Vicente[4], *[1]IRTA, Spain, [2]Oficina Catalana del Canvi Climàtic, Spain, [3]CREAF, Spain, [4]Instituto Pirenaico de Ecología CSIC, Spain*
[P2.032]	**Spatial variability of soil properties under Faidherbia albida system on a sandy soil in Zambia** E. Phiri*, P. Chanda, A.M. Mweetwa, *University of Zambia, Zambia*
[P2.033]	**Almond blooming: estimating cultivar-specific chill and heat requirements by a statistical approach** I. Díez, I. Funes, X. Aranda*, C. Biel, F. de Herralde, B. Grau, X. Miarnau, F. Vargas, R. Savé, *IRTA, Spain*
[P2.034]	**Using rice genetic diversity for climate change mitigation and adaptation** J.Y. Barnaby*[1], A.M. McClung[1], A. Adviento-Borbe[2], S.R.M. Pinson[1], L.H. Ziska[3], *[1]USDA-ARS-Dale Bumpers National Rice Research Center, USA, [2]USDA-ARS-Delta Water Management Research Unit, USA, [3]USDA-ARS-Crop Systems & Global Change Laboratory, USA*
[P2.035]	**Potential changes in agricultural net water needs and agroclimatic indicators in La Muga watershed under climate change conditions: A watershed-level approach.** R. Savé[1], I. Funes*[1], X. Aranda[1], *[1]IRTA, Spain, [2]Oficina Catalana de Canvi Climàtic, Spain, [3]CREAF, Spain, [4]Instituto Pirenaico de Ecología CSIC, Spain*
[P2.036]	**Effect of warming and elevated CO_2 in flowering number, insect visitation and speed of germination of leguminous forage Stylosanthes capitata (Vogel) in a Trop-T-FACE system** A.L. Alzate-Marin*, C. Costa Silva, J.S. Galaschi Teixeira, P.M. Sá Rivas, F. Bonifácio-Anacleto, C.A. Garófalo, C.A. Martinez, *University of São Paulo, Brazil*
[P2.037]	**Effect of climate change on chickpea (C*icer arietinum*) yield in north eastern part of south Africa** M.T. Mubvuma[1], J.B.O. Ogola*[1], T. Mhiza[1,2], *[1]University of Venda, South Africa, [2]University of Zimbabwe, Zimbabwe*
[P2.039]	**Selection of superior genotypes for enhancing tomato tolerance to heat stress conditions** R. Calafiore[1], C. Schettini[2], M.M. Rigano[1], V. Fontanella[2], A. Aliberti[1], S. Francesca[1], L. Frusciante[1], A. Barone*[1], *[1]University of Naples Federico II, Italy, [2]Alma Seges Soc. Coop., Italy*
[P2.040]	**Is adaptation of crop management practices sufficient for arable crops to cope with climate change?** M. Willaume*, A. Vermue, I. Irrazi, P. Debaeke, J-E. Bergez, J. Constantin, *INRA, France*
[P2.041]	**Revealing the phenotypic traits contributing to wheat yield in diverse climatic conditions in UK** J.P. Pennacchi*[1,2], P.J. Andralojc[2], E. Carmo-Silva[1], M.A.J. Parry[1], *[1]Lancaster University, UK, [2]Rothamsted Research, UK*
[P2.042]	**Unlocking physiological dynamics throughout crop lifecycles under field conditions** K. Mochida*[1,2], K. Takahagi[1,2], T. Matsuura[3], Y. Ikeda[3], D. Saisho[3], T. Hirayama[3], *[1]RIKEN Center for Sustainable Resource Science, Japan, [2]Kihara Institute for Biological Research, Yokohama City University, Japan, [3]Institute of Plant Science and Resources, Okayama University, Japan*
[P2.043]	**Addressing critical gaps in crop wild relative conservation in Asia** A. Davey, *Millennium Seed Bank, UK*
[P2.044]	**Prunus rootstocks for peach climate change adaptation** K. Bedis[1], S. Jiménez[1,3], J. Dridi[1], F. Morales[1], M. Sánchez-Díaz[2], J.J. Irigoyen[2], Y. Gogorcena*[1], *[1]Estación Experimental de Aula Dei (EEAD-CSIC), Spain, [2]Universidad de Navarra, Spain*

[P2.045]	**Rising nutrient availability may have much more impact than climate change on pearl millet in Senegal** L. Garcia[1], F. Affholder*[2], B. Sultan[3], B. Muller[2,4], P. Kouakou[2,5], *[1]Supagro, France, [2]CIRAD, France, [3]IRD, France, [4]ISRA, Senegal, [5]CIRDES, Burkina Faso*
[P2.046]	**Root-zone CO_2 enrichment increases biomass accumulation in lettuce and pepper plants** E. Leibar-Porcel*, A. Spence, M. McAinsh, I. Dodd, *Lancaster University, UK*
[P2.047]	**Adaptation to climate change underway: Adoption of drought resistant and heat tolerant potato varieties is increasing in Asia** M. Gatto, J. Qin, W. Pradel, V. Suarez, G. Hareau*, *International Potato Center (CIP), Peru*
[P2.048]	**Effect of genotype and climate conditions on breadmaking quality of triticale** A. Fras*, K. Golebiewska, D. Golebiewski, D.R. Mankowski, D. Boros, *Plant Breeding and Acclimatization Institute - National Research Institiute, Poland*
[P2.049]	**Climate change adaptability of cropping and farming systems for Europe (Climate-CAFÉ project)** E. Justes*[1], W. Rossing[2], A. Vermue[1], J. Bachinger[3], L. Buchi[5], G. Carlsson[4], J. Constantin[1], E. Garcia-Ponce[6], H. Gomez-Macpherson[6], M. Hanegraaf[7], *[1]INRA, France, [2]Wageningen University, The Netherlands, [3]ZALF, Germany, [4]SLU, Sweden, [5]Agroscope, Switzerland, [6]CSIC, Spain, [7]NMI, The Netherlands*
[P2.050]	**Temporal course of percolation water and nitrate leaching of onion grown in lysimeters under simulated future precipitation conditions** N. Schmidt[1], N. Mayer[1], G. Berthold[2], J. Zinkernagel[1], C. Schlering*[1], *[1]Geisenheim University, Germany, [2]Hessian Agency for Nature Conservation, Environment and Geology, Germany*
[P2.051]	**Novel UAV plant phenotyping plug-in for Fiji, MosaicTool, and case study on nitrogen treatment effects on three varieties of barley** R. Vicente[1], O. Vergara-Diaz[1], J.A. Fernandez-Gallego[1], G. El-Haddad[2], M.D. Serret[1], J.L. Araus[1], S. Kerfal[3], J. Melichar[4], S.C. Kefauver*[1], *[1]University of Barcelona, Spain, [2]Software Engineering Consultant, Lebanon, [3]Syngenta, Spain, [4]Syngenta, UK*
[P2.052]	**Evaluation of Salt Tolerance index (STI) Of four introduced cool season grasses species under irrigation** N.S. Al-Ghumaiz*, M.I. Motawei, E.M. Abd-Elmoniem, *Qassim University, Saudi Arabia*
[P2.053]	**The rejuvenation by tissue culture in agave could be influences by enviromental changes** A.R. Morales, K.M.M. Mio, Z.Y. De la Torre Espinoza, M.C.T. Ordoñez, A.Q. Moreno, M.R.R. Diaz, E. Castaño, F.S. Teyer*, *Centro de Investigacion Cientifica de Yucatan, Mexico*
[P2.054]	**Strategies and challenges for climate change adaptation above 60° N: The case of Finnish cropping systems** C.I. Lizarazo*[1], A. Vermue[2], E. Kylkilahti[1], H. Mikkola[1], E. García-Ponce[3], H. Gomez-Macpherson[3], E. Justes[2], F.L. Stoddard[1], *[1]University of Helsinki, Finland, [2]French National Institute for Agricultural Research (INRA), France, [3]Instituto the Agricultura Sostenible (CSIC), Spain*
[P2.055]	**Systematic global gridded crop simulations for improved understanding of climate change impacts on agricultural productivity.** C. Müller*[1], J. Elliott[2,3], *[1]Potsdam Institute for Climate Impact Research, Germany, [2]University of Chicago, USA, [3]Columbia University and NASA Goddard Institute for Space Studies, USA*
[P2.056]	**Using OJIP fluorescence transient to study the effects of ozone stress under two water regimes** B.G. Maliba*, P.I. Michael, J.M. Berner, *Unit of Environmental Sciences and Management, North-West University, South Africa*
[P2.057]	**Smart agriculture using internet of things, machine learning and image processing** A. Kapoor*[1,2], S. Bhat[1,2], A. Mehra[1,2], *[1]Sir M Visvesvaraya Institute Of Technology, India, [2]Visvesvaraya Technological University, India*
[P2.058]	**Molecular and physiological analysis underscores schedule of drought and pathogen stresses in regulating differential responses in *Arabidopsis thaliana* under combined stress** A. Gupta*, S.K. Dixit, M. Senthil-Kumar, *National Institutes of Plant genome Research, India*
[P2.059]	**Mechanisms of nutrient capture and release by biochar particles for improving plant growth: Developing novel C-sequestering fertilizer-chars for agriculture** C.I. Kammann*[1], A. Williams[2], H-P. Schmidt[3], A. Haller[1], S. Marhan[4], C. Müller[2], *[1]Hochschule Geisenheim University, Germany, [2]University Giessen, Germany, [3]Ithaka Institute, Switzerland, [4]University Hohenheim, Germany*
[P2.060]	**Impacts of 19 years long atmospheric CO_2 enrichment on the aboveground biomass production and population dynamics of a periodically wet semi-natural grassland** R. Seibert*[1], L. Grünhage[1], C. Kammann[2], C. Müller[1], *[1]Institute for Plant Ecology, Justus Liebig University, Germany, [2]Hochschule Geisenheim University, Germany*
[P2.061]	**Poultry manure application improves maize grain yield in impoverished soils of South-west Nigeria** O.C. Nwoke*, O.A. Ogunwale, *Osun State University, Nigeria*
[P2.062]	**Study of Iranian National Genebank wheat landraces tolerant to drought under normal irrigated conditions** L. Nasirzadeh*[1,2], B.S. Lalehloo[2], E.M. Hervan[1], *[1]Islamic Azad University, Iran, [2]Seed and Plant Improvement Institute, Iran*

[P2.063]	**A new conceptual framework for the *System of Rice Intensification (SRI*) for research and practice** E. Styger, *Cornell University, USA*
[P2.064]	**Response of crops yield to long-term reduced soil tillage intensity: Risk in changing climate conditions** V. Boguzas*, S. Raudonius, D. Jodaugiene, K. Romaneckas, *Aleksandras Stulginskis University, Lithuania*
[P2.065]	**Net ecosystem exchange, net primary productivity and greenhouse gas emissions in pastures of Panicum maximum Jacq. and Stylosanthes capitata Voegel grown under elevated CO_2 and warming in a Trop-T-FACE system** C.A. Martinez*[1], E.A.D. de Oliveira[1], V. Bossan[1], C. Borges[1], T.S. Mui[1], M.A. Gonzalez-Meler[2], *[1]University of São Paulo, Brazil, [2]University of Illinois, USA*
[P2.066]	**Making climate smart agriculture work for nutrition** S. Titus*[1], H. Danton[2], *[1]Save the Children, USA, [2]John Snow, Inc., USA*
[P2.067]	**A model-based decision support system integrated with smart sensors to support deficit irrigation strategies for tomato crop in Mediterranean environments** M.M. Giuliani[1], V. Buono*[3], G. Gatta[1], A. Manes[4], E.E. Riezzo[3], E. Nardella[1], G. Manes[2], *[1]University of Foggia, Italy, [2]University of Florence, Italy, [3]Sysman Ltd., Italy, [4]Netsens Ltd., Italy, [5]Syngenta Italy Inc., Italy*
[P2.068]	**Variation in agronomical-physiological traits and transcript levels in wheat lines differing in the restriction to water lose** J-L. Araus, R. Vicente, S. Medina*, *Barcelona University, Spain*
[P2.069]	**Un Approach to climate change: Temperature effect on metabolomic profiling of tomato-P-syringae pathosystem** A. González-Hernández, E. Fernández-Crespo*, L. Scalschi, E. Llorens, L. Lapeña, P. García-Agustín, G. Camañes, B. Vicedo, *Universitat Jaume I-Castellón, Spain*
[P2.070]	**Using biostimulants to enhance plant tolerance to abiotic stresses** J.C. Cabrera*[1], G. Borreux[1], J. Louvieaux[2], G. Wégria[1], *[1]Fyteko, Belgium, [2]CARAH, Belgium*
[P2.071]	**Climotransfer function-based spatial calibration of remotely sensed crop growing season** L. Ye[1], *[1]Chinese Academy of Agricultural Sciences, China, [2]Ghent University, Belgium*
[P2.072]	**Can intercropped trees mitigate heat and drought effects on grapevines? A study of microclimate patterns in agroforestry vineyards, Southern France** J. Grimaldi*[1], W. Trambouze[2], T. Dufourcq[3], M. Vergne[4], R. Fieuzal[1], C. Pelletier[1], T. Houet[5], V. Bustillo[1], *[1]University Paul Sabatier, France, [2]Chambre d'Agriculture de l'Hérault, France, [3]Institut Français de la Vigne et du Vin, pôle Sud-ouest, France, [4]Institut Français de la Vigne et du Vin pôle Bordeaux-Aquitaine, France, [5]CNRS, France*
[P2.073]	**Licuri palm (Syagrus coronata) products improvement by family farming communities: A nurse-plant and a new xerophytic crop** A.J.A. Carvalho*[1], M.H.S. Ferreira[1], I.M. Ferreira[2], P.R. Piras[2], *[1]Instituto Federal de Educação, Ciência e Tecnologia Baiano (IF Baiano), Brazil, [2]Universidade Estadual de Feira de Santana (UEFS), Brazil*
[P2.074]	**Breeding progress as a tool to ensure sustain growth of cereal yields in changing climate condition** T. Oleksiak, *Plant Breeding and Acclimatization Institute, Poland*
[P2.075]	**Mineral and heavy metal composition of Telfairia Occidentalis cultivated on gas flared soils remediated with Biochar** D. Akachukwu*[1], M.A. Gbadegesin[2], P.C. Ojimelukwe[1], C. Atkinson[3], *[1]Michael Okpara University of Agriculture, Nigeria, [2]University of Ibadan, Nigeria, [3]University of Greenwich, UK*
[P2.076]	**Wheat ear counting in-field conditions: Low-cost approach using laplacian and median filters on rgb images** J.A. Fernandez-Gallego*[1], S.C. Kefauver[1], J.L. Araus[1], N.A. Gutiérrez[2], M.T. Nieto-Taladriz[3], *[1]University of Barcelona, Spain, [2]Instituto Tecnológico Agrario de Castilla y León (ITACyL), Spain, [3]Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA), Spain*
[P2.077]	**Effect of climate changes on the dynamic of water simulated for soil conditions in Illinois (USA)** N.C. Resende*[1], J.H. Miranda[1], R.A. Cooke[2], *[1]University of Sao Paulo, Brazil, [2]University of Illinois at Urbana Champaign, USA*
[P2.078]	**Agronomical, physiological and molecular responses of durum wheat to genotypic variability and contrasting water conditions: Comparative performance of flag leaves and ears** R. Vicente*[1], O. Vergara-Díaz[1], S. Medina[1,2], F. Chairi[1], S.C. Kefauver[1], J. Bort[1], M.D. Serret[1], N. Aparicio[3], M.T. Nieto-Taladriz[4], J.L. Araus[1], *[1]University of Barcelona, Spain, [2]International Crops Research Institute for Semi-Arid Tropics (ICRISAT), India, [3]Technological Institute of Agriculture of Castilla y León, Spain, [4]National Institute for Agricultural and Food Research and Technology, Spain*
[P2.079]	**Information-theoretic approach to develop resilience indicator for climate-smart agriculture in rice farming** J. Kim*[1,2], Y. Zhang[1], Y. Indrawati[1], M. Kang[2], S. Choi[2], J. Yun[1], Y. Kim[2], *[1]Seoul National University, Republic of Korea, [2]National Center for AgroMeteorology, Republic of Korea*

[P2.080]	**The deterrent effect of Camponotus ants on potential pollinators of Pityrocarpa moniliformis (Leguminosae, Mimosoideae): A positive effect on plant reproductive output** M.H.S. Ferreira*[1], L.P. Queiroz[1], *[1]Instituto Federal de Educação, Ciência e Tecnologia Baiano (IF Baiano), Brazil, [2]Universidade Estadual de Feira de Santana (UEFS), Brazil*
[P2.082]	**Tomatoes future cultivars – challenges and strategies for drought and salt tolerance improvement** R.L. Sumalan*[1], L. Copolovici[2], R. Sumalan[1], D. Copolovici[2], *[1]Banat's University of Agricultural Sciences and Veterinary Medicine, Romania, [2]Aurel Vlaicu University Arad, Romania*
[P2.083]	**Molecular mechanisms that regulate temperature development of cereals** K. Geuten, *KU Leuven, Belgium*
[P2.084]	**Effects of elevated temperatures on floral meristem initiation and reproductive organ development in tomato** F. Delmas, J. Hunziker, C. Chevalier, C. Rothan, D. Just, C. Bres, M. Hernould*, *INRA - University of Bordeaux, France*
[P2.085]	**Genetic variability for growth, yield and nutritional composition between Rwandan rice (Oryza sativa L.) cultivars grown in controlled environment under two NPK levels** A. Mukamuhirwa*[1,2], H.P. Hovmalm[1], R.O.O. Rios[1], O. Nyamangyuoku[2], E. Johansson[1], *[1]Swedish University of Agricultural Sciences, Sweden, [2]University of Rwanda, Rwanda*
[P2.086]	**Climate effects on crop quality and agroecological adaptation: a case study on tea** S.A. Ahmed*[1], J.R.S. Stepp[2], C.O. Orians[3], T.G. Griffin[4], A.R. Robbat[3], S.C. Cash[3], W.H. Han[4], C.M. Matyas[2], R.B. Boehm[3], N.K. Kfoury[3], *[1]Montana State University, USA, [2]University of Florida, USA, [3]Tufts University, USA, [4]Tea Research Institute of the Chinese Academy of Agricultural Sciences, China*
[P2.087]	**Climate change is already impacting pastoral agriculture in Australia** R.J. Eckard*, B.R. Cullen, *The University of Melbourne, Australia*
[P2.088]	**Neptunion, a plant metabolite inducing water stress tolerance in crops** M. Borja*, J. Bonet, *Plant Response Biotech, Spain*
[P2.089]	**Applying a food-energy-water nexus framework for modelling global climate stabilization scenarios that support food security** P.S. Stoy[1], S.A. Ahmed*[1], T.G. Gerken[1], G.B. Bromley[1], M.M. Morgan[1], D.W. Wood[1], A.C. Cook[1], B.B. Bauer[1], E.N.J. Brookshire[1], J.H. Haggerty[1], *[1]Montana State University, USA, [2]University of South Dakota, USA, [3]Southern Agricultural Research Center, Montana State University, USA, [4]University of Wyoming, USA, [5]Northwestern Agricultural Research Center, Montana State University, USA*
[P2.090]	**Application of plant growth promoting microorganisms via seed coating for sustainable agriculture** Y. Ma[1], A. Látr[2], I. Rocha*[1], H. Freitas[1], M. Vosátka[3], R.S. Oliveira[1,4], *[1]University of Coimbra, Portugal, [2]Symbiom Ltd., Lanskroun, Czech Republic, [3]Institute of Botany, Academy of Sciences of the Czech Republic, Czech Republic, [4]Polytechnic Institute of Porto, Portugal*
[P2.091]	**H2O2 is involved in stomatal responses of abi1-1 mutants during a combination of drought and high temperatures** S.I. Zandalinas*[1], V. Arbona[1], A. Gomez-Cadenas[1], D. Balfagón[1], M.A. Inupakutika[2], R. Mitller[2], *[1]Universitat Jaume I, Spain, [2]University of North Texas, USA*
[P2.092]	**The effects of climate change on Japonica rice thermal resources and cultivation in high latitude, Northeast China** J. Duan, *China Meteorological Administration, China*
[P2.093]	**L-Met activates Arabidopsis GLP Ca^{2+} channels upstream of ROS production and regulates stomatal movement** D.D. Kong[1], H.C. Hu[1], E.J. Okuma[1], Y.R. Lee[1], H.S. Lee[1], S. Munemesa[1], D. Cho[1], C. Ju[1], L. Pedoeim[1], J.M. Kwak*[1], *[1]IBS, Republic of Korea, [2]DGIST, Republic of Korea*
[P2.094]	**Differential cellular activities control abscission process in Arabidopsis** Y. Lee*[1], J. Lee[1], T.H. Yoon[1], M.K. Lee[1], S.Y. Oh[1], H.K. Cho[1], J.H. Lee[1], J.M. Kwak[1,2], *[1]Institute for Basic Science (IBS), Republic of Korea, [2]DGIST, Republic of Korea*
[P2.095]	**Long-term study of the photosynthetic performance and acclimation potential of the perennial ryegrass *Lolium perenne* L. facing combined environmental constraints in a managed temperate grassland** A. Digrado*[1], A. Bachy[1], A. Mozaffar[1,2], N. Schoon[2], A-C. Dalcq[1], C. Amelynck[2], F. Bussotti[3], M-L. Fauconnier[1], M. Aubinet[1], B. Heinesch[1], *[1]University of Liège-Gembloux Agro-Bio Tech, Belgium, [2]Royal Belgian Institute for Space Aeronomy, Belgium, [3]University of Florence, Italy*
[P2.096]	**Assessment of crop yield simulations for citrus plantations using Cropsyst model for Lower Seyhan Plain in Turkey** A. Cilek*, S. Berberoglu, C. Donmez, M.A. Erdogan, *Cukurova University, Turkey*
[P2.097]	**Modelling the future wheat productivity using mechanical and process based models in an intense Mediterranean agricultural basin** O. Satir*[1], A. Cilek[2], S. Berberoglu[2], *[1]Yuzuncu Yil University, Turkey, [2]Cukurova University, Turkey*
[P2.098]	**Point stress during flowering influences yield in temperate rice more than seasonal temperatures** M.B. Espe*[1], K. McKenzie[3], R. Mutters[2], B.A. Linquist[1], C. van Kessel[1], *[1]University of California- Davis, USA, [2]University of California - Cooperative Extension, USA, [3]California Cooperative Rice Research Foundation, USA*

[P2.099]	**Impacts of climate change scenarios on growth, yield, and fruit characteristics of hot peppers** S.G. Lee, S.K. Kim*, H.J. Lee, C.S. Choi, J.S. Kim, *National Institute of Horticultural and Herbal Science, Republic of Korea*
[P2.100]	**Growth and yield of Kimchi cabbage leaves in response to low air temperature and subsequent recovery treatments** H.J. Lee, S.K. Kim*, S.G. Lee, C.S. Choi, J.S. Kim, *National Institute of Horticultural and Herbal Science, Republic of Korea*
[P2.101]	**The potential impacts of climate change and adaptation strategies on maize (obatanpa) production in drought prone communities in Northern Ghana** G. Mohan*[1], G.S. Abdul[2], M. Hirotaka[1], *[1]The University of Tokyo, Japan, [2]University for Development Studies, Ghana*
[P2.102]	**The effects of elevated CO_2, O_3 and drought and combinations of them on the photosynthetic performance of Wheat** B.G. Maliba*, P.I. Michael, J.M. Berner, *North-West University, South Africa*
[P2.103]	**Characterization of growth behaviour of rice plant under drought stress** S.N.C.M. Dias*, S. Werisch, N. Schütze, *Dresden University of Technology, Germany*
[P2.104]	**Modelling price and yield risks: a case study of pear in Taiwan** S.L. Chen*[1], Y.L. Huang[2], *[1]National Taipei University, Taiwan, [2]National Tsing Hua University, Taiwan*
[P2.105]	**Validation of ESA Sentinel-3 OLCI FAPAR estimations in a vineyard area at the Valencia anchor station** E. Albero*[1], I. Bautista[2], D. Castaño[2], D.J. Iglesias[3], A. Lidón[2], C. Lull[2], F. Martínez-Campos[2], E. Lopez-Baeza[1], *[1]University of Valencia, Spain, [2]Polytechnic University of Valencia, Spain, [3]Valencian Institute for Agronomical Research, Spain*
[P2.106]	**Threats and challenges to fertile agricultural fields: A case of Cukurova plain** A. Cilek*, M. Unal, S. Berberoglu, *Cukurova University, Turkey*
[P2.107]	**A new methodology for the evaluation of ecological characteristic of the camel - A case study of grazing optimization theory and camel line** B. Hoshino*, K. Imamura, R. Salmurzauli, S. Nurtazin, *Rakuno Gakuen University, Japan*
[P2.108]	**The accumulation of heavy metals (Fe, Cd and Pb) by water spinach under CO_2 enrichment environment** J. Khairiah*[1], M.A.E. Syazana[1], M.Z. Vinotini[1], S.M.H.N. Safenah[1], C.M.Z.C. Radziah[1], J. Habibah[1], M.B. Hossain[2], B.S. Ismail[1], A.H. Kartini[1], *[1]Universiti Kebangsaan Malaysia, Malaysia, [2]Bangladesh Institute of Nuclear Agriculture, Bangladesh*
[P2.109]	**Threats facing crop wild relatives** C.P. Cockel, *Royal Botanic Gardens, UK*
[P2.110]	**Maize from the Algerian desert for facing climate change** A. Djemel[1,2], L. Álvarez-Iglesias[3], P. Revilla[3], R. Santiago[2], N. Pedrol*[2], *[1]École Nationale Supérieure Agronomique, Algeria, [2]Universidade de Vigo, Spain, [3]Misión Biológica de Galicia (CSIC), Spain*
[P2.111]	**Chaura (Gaultheria pumila), the super fruit for a climate change scenario** R. García-Gonzáles*[1], J. Pico-Mendoza[1], B. Carrasco[2], K. Quiroz[1], E. Greck[1], E. Villagra[1], M. Seiltgens[1], H. Pino[1], P.D.S. Caligari[3], A. Arencibia[1], *[1]Universidad Católica del Maule, Chile, [2]Pontificia Universidad Católica de Chile, Chile, [3]Verdant BioScience Pte Ltda, Singapore*
[P2.112]	**Vulnerability and tradeoffs of dairy farmers to the impacts of climate variability and change in India** A. Radhakrishnan*[1], J. Gupta[1], D. Kumar[2], *[1]NDRI, India, [2]IIT, India*
[P2.113]	**Effect of chilling accumulation on fruit yield of olive trees in Egypt** M.H. El-Sheikh, H.F. Zahran*, *Arid Lands Cultivation Research Institute, Egypt*
[P2.114]	**New potato crop for a new climate - the application of complex biotechnological tools to improve resistance to biotic and abiotic stress** E. Rakosy-Tican*[1], I. Molnar[2,1], R. Thieme[3,2], A. Aurori[4,1], E. Besenyei[4,1], T. Thieme[4,3], I. Vass[4], *[1]Babes-Bolyai University, Romania, [2]Julius Kuehn Institute, Germany, [3]BTL Labor GmBh, Germany, [4]Biological Research Center Szeged, Hungary*
[P2.115]	**Predicting climate change impact on crop yields in Mediterranean Spain using the century model** J. Álvaro-Fuentes*[1], C. Cantero-Martínez[2], D. Plaza-Bonilla[1], S. Franco-Luesma[1], E. Paracuellos[1], J.L. Arrúe[1], *[1]Estación Experimental de Aula Dei (EEAD-CSIC), Spain, [2]Universidad de Lleida, Spain*
[P2.116]	**Puzzle out auxin regulatory mechanisms controlling stress-induced adaptation of growth and photosynthesis** S. Madhavan*, A. Bielach, E. Elrefaay, V.B. Tognetti, *Masaryk University, Czech Republic*
[P2.117]	**Long term response of citrus in Florida to presumed climate change** L.G. Albrigo, *University of Florida, USA*
[P2.118]	**Intensification and diversification of crop rotation in no-till agriculture improve soil biochemical / biological and physical quality indexes in less than three years** J. Covelli[1], L. Gabbarini[1], A. Ferrari[1], B. Robledo[1], J. Frene[1], D. Reyna[1], A. Dominguez[2], C. Ortiz[2], P. Rodriguez[1], L. Wall*[1], *[1]University of Quilmes, Argentina, [2]University of Río Cuarto, Argentina*

[P2.119]	**Efficacy of calcium silicate on greenhouse gases emissions of rice-cropped soil under water and oxygen influence** A.A. Elisa*[1], I. Roslan[1], S. Ninomiya[1], E. Yasunaga[1], K. Senoo[1], W. Shen[1], C. Hayakawa[1], W. Guo[1], *[1]The University of Tokyo, Japan, [2]Universiti Putra Malaysia, Malaysia*
[P2.120]	**Hot points of digestate utilization in agriculture** A. Tomócsik*[1], B. Foreid[2], E. Alvarenga[2], B. Németh-Borsányi[3], G. Mezohegyi[3], I. Demeter[1], A. Holes[1], T. Szegi[4], M. Makádi[1], *[1]Research Institute of Nyíregyháza, Hungary, [2]Norwegian Institute of Bioeconomy Research NIBIO, Norway, [3]Inwatech Environmental Ltd, Hungary, [4]Szent István University, Hungary*
[P2.121]	**Identification of genetic selection footprints in barley landraces in relation to agroclimatic indices** R. Serrano-Notivoli[1], S. Beguería[1], E. Igartua*[1], C.P. Cantalapiedra[1], A.M. Casas[1], B. Contreras-Moreira[1,2], *[1]Estación Experimental de Aula Dei (CSIC), Spain, [2]Fundación ARAID, Spain*
[P2.122]	**Root exudates drive interspecific facilitation by enhancing nodulation and N_2 fixation** B. Li[1], Y.-Y. Li[1], H.-M. Wu[1], F.-F. Zhang[1], C. Li[1], X.-X. Li[1], H. Lambers[2], L. Li*[1], *[1]China Agricultural University, China, [2]University of Western Australia, Australia*
[P2.123]	**Simultaneous improvement in water use, productivity and albedo through crop structural modification** D.T. Drewry*[1], P. Kumar[2], S. Long[2], *[1]Jet Propulsion Laboratory, USA, [2]University of Illinois, USA*
[P2.124]	**Induced resistance mechanisms in chickpea plant against brommrape (Orobanche crenata) by rhizobia inoculation** Y. Mabrouk*, S. Mjri, M. Saidi, O. Belhadj, *CNSTN, Tunisia*
[P2.125]	**Field canopy measurements for OTCI validation in a vineyard area at the Valencia Anchor Station** D. Castaño[1], I. Bautista[1], C. Lull[1], F. Martínez-Campos[1], A. Lidón[1], E. Albero*[2], D.J. Iglesias[3], E. López-Baeza[2], *[1]Polytechnic University of Valencia, Spain, [2]University of Valencia, Spain, [3]Valencian Institute for Agronomical Research, Spain*