

# List of Posters

All names are given without academic titles.

## Session A: Health and nutrition

### TOPIC A1

#### ■ Prevention of non-communicable diseases, particularly obesity, sarcopenic obesity, and the metabolic syndrome

#### No. 1 (A-134)

~~Determination of antioxidant potential and total phenolic and anthocyanin content of peel, pulp and kernel fractions of Ziziphus jujuba fruit collected from Turkey~~

**NEW TITLE:** The combined action of natural antimicrobials and high hydrostatic pressure on inactivation of different microorganisms: A review

**NEW AUTHORS:** F. Şahmurat<sup>1</sup>, A. Duran<sup>1</sup>, A. Yüçetepe<sup>1</sup>, B. Özçelik<sup>2</sup>

<sup>1</sup>Department of Food Engineering, Faculty of Engineering, Aksaray University, TR68100, Aksaray, Turkey

<sup>2</sup>Department of Food Engineering, Faculty of Chemical and Metallurgical Engineering, Istanbul Technical University, Maslak, TR-34469, Istanbul, Turkey

#### No. 2 (A-145)

**Microwave treated starch-protein blends: An innovative raw material to improve the quality of gluten-free products for coeliac disease patients**

M. Villanueva<sup>1</sup>, B. De Lamo<sup>1</sup>, J. Harasym<sup>1,2</sup>, F. Ronda<sup>1</sup>

<sup>1</sup> University of Valladolid, Valladolid, Spain, <sup>2</sup> Wrocław University of Economics, Wrocław, Poland

#### No. 3 (A-172)

**The European food, nutrition and health research infrastructure**

P. Finglas<sup>1,2</sup>, K. Zimmermann<sup>3</sup>, I. Spiroski<sup>4</sup>

<sup>1</sup> Quadram Institute Bioscience, Norwich, United Kingdom, <sup>2</sup> EuroFIR AISBL, Brussels, Belgium, <sup>3</sup> Wageningen Economic Research, Den Haag, Netherlands, <sup>4</sup> Institute of Public Health of the Republic of Macedonia, Skopje, Macedonia, the former Republic of Yugoslav

#### No. 4 (A-212)

**Influence of resistant starch type III on gut microbiota and glucose metabolism in (pre)diabetics**

J. Schweizer<sup>1</sup>, S. R. Dautel<sup>1</sup>, A. Schweinlin<sup>1</sup>, M. Basrai<sup>1</sup>, A. Schwiertz<sup>2</sup>, S. C. Bischoff<sup>1</sup>

<sup>1</sup> Institute of Nutritional Medicine, University of Hohenheim, Stuttgart, Germany, <sup>2</sup> Institute of Microecology, Herborn, Germany

#### No. 5 (A-220)

**Angiotensin-I converting enzyme inhibitory and antioxidant activity of rosehip (Rosa L.) infusions in vitro**

K. N. Kasapoğlu<sup>1</sup>, B. Özçelik<sup>1</sup>

<sup>1</sup> Istanbul Technical University, Department of Food Engineering, Istanbul, Turkey

#### No. 6 (A-221)

**Minority crops utilization for diversification of gluten-free food products offer**

J. Harasym<sup>1,2</sup>, M. Villanueva<sup>1</sup>, A. G. Solaesa<sup>1</sup>, W. Abebe<sup>3</sup>, P. Caballero<sup>1</sup>, F. Ronda<sup>1</sup>

<sup>1</sup> University of Valladolid, Valladolid, Spain, <sup>2</sup> Wrocław University of Economics, Wrocław, Poland,

<sup>3</sup> Ethiopian Institute of Agricultural Research, Adis Abeba, Ethiopia

#### No. 7 (A-223)

**Therapeutic effect of highly purified oat beta-glucan on colon inflammation states— a model study**

J. Harasym<sup>1,2</sup>, K. Dziendzikowska<sup>3</sup>, J. Gromadzka-Ostrowska<sup>3</sup>

<sup>1</sup> University of Valladolid, Valladolid, Spain, <sup>2</sup> Wrocław University of Economics, Wrocław, Poland,

<sup>3</sup> Warsaw University of Life Science, Warsaw, Poland

**No. 8 (A-228)      Microwave assisted heat moisture treatment as useful tool in improvement of gluten-free flours functional characteristic**

F. Ronda<sup>1</sup>, J. Harasym<sup>1,2</sup>, M. Villanueva<sup>1</sup>, A. G. Solaesa<sup>1</sup>, W. Abebe<sup>3</sup>, P. Caballero<sup>1</sup>  
 1 University of Valladolid, Valladolid, Spain, 2 Wrocław University of Economics, Wrocław, Poland,  
 3 Ethiopian Institute of Agricultural Research, Adis Abeba, Ethiopia

**No. 9 (A-238)      Resveratrol inhibits activation of human intestinal mast cells, key effector cells of food allergy**

E. Petrov<sup>1</sup>, Y. Soltow<sup>1</sup>, S. C. Bischoff<sup>1</sup>, A. Lorentz<sup>1</sup>  
 1 University of Hohenheim, Institute of Nutritional Medicine, Stuttgart, Germany

**TOPIC A2      ■ Food and agricultural approaches to reduce malnutrition**

**No. 10 (A-112)      A study to induce production of double yolk table eggs in Poultry layers**

L. Cruz<sup>1</sup>  
 1 Veterinarian, Animal Nutrition, Manila, Philippines

**No. 11 (A-141)      Does governance impact undernutrition: An integrated approach to reducing underweight in children under 5 years**

G. Woode<sup>1</sup>  
 1 University Research Company LLC., Monitoring and Evaluation, Accra, Ghana

**No. 12 (A-171)      The health-environment nexus: A theoretical food replacement study in Dutch cardiac patients**

E. Mertens<sup>1</sup>, A. Kuijsten<sup>1,2</sup>, P. van 't Veer<sup>1</sup>, J. M. Geleijnse<sup>1,2</sup>  
 1 Wageningen University, Human Nutrition and Health, Wageningen, Netherlands,  
 2 Top Institute Food and Nutrition, Wageningen, Netherlands

**No. 13 (A-178)      Nutrition-specific and sensitive drivers of poor child nutrition in Kilde Awlalo-Health and Demographic Surveillance Site, Tigray, Northern Ethiopia: implications for public health nutrition in resource-poor settings**

S. Abera<sup>1,2,3,4</sup>, E. Kantelhardt<sup>5,6</sup>, A. Mulugeta<sup>3,4</sup>, A. Aregay<sup>1,3</sup>, G. Ejeta<sup>7</sup>, J. Lauvai<sup>8</sup>, A. Wienke<sup>5</sup>, V. Scherbaum<sup>1,2</sup>  
 1 University of Hohenheim, Institute of Biological Chemistry and Nutrition, Stuttgart, Germany, 2 Food Security Center, University of Hohenheim, Stuttgart, Germany, 3 School of Public Health, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, 4 Kilde Awlalo-Health and Demographic Surveillance Site, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, 5 Institute of Medical Epidemiology, Biostatistics, and Informatics, Faculty of Medicine, Martin-Luther University, Halle (Saale), Germany, 6 Department of Gynaecology, Faculty of Medicine, Martin-Luther University, Halle (Saale), Germany, 7 Department of Agronomy, Purdue University, Indiana, United States, 8 Institute of Biofunctionality and Safety of Food, University of Hohenheim, Stuttgart, Germany

**No. 14 (A-182)      Safe and nutritious food: Ideal family!—A behavior change intervention to improve optimal feeding and food hygiene**

A. A. Müller<sup>1</sup>, S. Sobhan<sup>1</sup>, T. M. Huda<sup>2</sup>, A. S. Wendt<sup>1</sup>, J. L. Waid<sup>1,3</sup>, J. Sultana<sup>2</sup>, S. Gabrysch<sup>1,4</sup>  
 1 Heidelberg University, Institute of Public Health, Heidelberg, Germany, 2 icddr, b, Infectious Diseases Division, Dhaka, Bangladesh, 3 Helen Keller International, Dhaka, Bangladesh, 4 Heidelberg University, Heidelberg Center for the Environment, Heidelberg, Germany

**No. 15 (A-192)      Assessment of iron and copper composition of selected underutilised vegetables of South Western Nigeria**

T. Ayeyemi<sup>1</sup>, O. Jusina<sup>2</sup>, I. Kemi<sup>2</sup>  
 1 University of Bonn, Bonn, Germany, 2 Obafemi Awolowo University, Ile-Ife, Nigeria

**No. 16 (A-205) Food taboos among pregnant and lactating women in developing countries**  
N. Chareh<sup>1</sup>, V. Scherbaum<sup>1</sup>  
 1 University of Hohenheim, Stuttgart, Germany

**No. 17 (A-245) Self-reported health status of food bank users**  
A. Bscheiden<sup>1</sup>, J. Depa<sup>2</sup>, N. Stroebele-Benschop<sup>1</sup>  
 1 University of Hohenheim, Molecular and Applied Nutritional Psychology (180d), Stuttgart, Germany,  
 2 Fulda University of Applied Sciences, Nursing and Health Sciences, Fulda, Germany

## Session B: Resilience, adaptation and sustainable intensification of food production systems

**TOPIC B1** ■ **Is zero hunger at zero land use change possible? Future land use strategies: Restoration, intensification or land expansion?**

**No. 18 (A-108) Sustainable intensification land use towards agri food system and poverty alleviation: Case of agroforestry**  
I. Nunoo<sup>1</sup>, V. Nunoo<sup>2</sup>  
 1 Kwame Nkrumah University of Science and Technology, Agricultural Economics, Agribusiness and Extension, Kumasi, Ghana, 2 Kwame Nkrumah University of Science and Technology, Geography and Rural Development, Kumasi, Ghana

**No. 19 (A-215) How do agricultural policies affect the poor and the environment in Uganda? Insights from a micro-macro linked CGE modeling approach**  
C. Kornher<sup>1</sup>, C. Henning<sup>1</sup>  
 1 Kiel University, Department of Agricultural Economics, Kiel, Germany

**No. 20 (A-207) Is crop cultivation in savannas sustainable? - Assessing land use change impacts on ecosystem functions using modelling**  
B. Warth<sup>1</sup>, C. Marohn<sup>1</sup>, F. Asch<sup>1</sup>  
 1 University of Hohenheim, Institute of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Stuttgart, Germany

**No. 21 (A-189) Minimization of postharvest losses in fruit and vegetable systems: Integration of strategies**  
D. Spadaro<sup>1</sup>, A. Garibaldi<sup>1</sup>, M. L. Gullino<sup>1</sup>  
 1 University of Torino, AGROINNOVA, Grugliasco, Italy

~~**No. 22 (A-185) Who poses a misdirecting question will get an even more bewildering response**~~  
~~S. M. Albrecht<sup>1</sup>~~  
~~1 Project Agricultural Transformation Review (ATR), Oldenswort, Germany~~

**No. 23 (A-173) Bees in politics**  
T. M. Klotz<sup>1</sup>  
 1 TUM School of Governance Munich, Chair of Environmental and Climate Policy, Munich, Germany

**No. 24 (A-169) What about taste? The case of the “tasteless” hybrid plantains in Ghana**  
L. Scheiterle<sup>1</sup>, R. Birner<sup>1</sup>  
 1 University of Hohenheim, Hans-Ruthenberg-Institute, Stuttgart, Germany

- No. 25 (A-154) Eating the soil: The effect of soil properties on food's mineral composition**  
S. Fischer<sup>1</sup>, T. Hilger<sup>1</sup>, I. Jordan<sup>2</sup>, J. Karungi<sup>3</sup>, G. Cadisch<sup>1</sup>  
 1 University of Hohenheim, Institute of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Stuttgart, Germany, 2 Justus Liebig University Giessen, Center for International Development and Environmental Research (ZEU), Giessen, Germany, 3 University of Makerere, Department of Agricultural Production, Kampala, Uganda
- No. 26 (A-129) Urban and peri urban horticulture in Namibia**  
A. D. Fosso<sup>1</sup>  
 1 Namibian Horticulture Trust, Horticulture, Windhoek, Namibia
- No. 27 (A-123) Risk management strategies among crop farmers in Bauchi State, Nigeria**  
R. Sani<sup>1</sup>  
 1 Abubakar Tafawa Balewa University, Agric Economics, Bauchi, Nigeria
- No. 28 (A-122) Modelling response of rubber plantations towards future environmental change and options for sustainable management**  
X. Q. Yang<sup>1,2,3</sup>, M.-J. Schelhaas<sup>4</sup>, S. Blagodatsky<sup>1</sup>, H. X. Liu<sup>1</sup>, C. Marohn<sup>1</sup>, J. C. Xu<sup>3</sup>, G. Cadisch<sup>1</sup>  
 1 University of Hohenheim, Stuttgart, Germany, 2 Kunming Institute of Botany, CAS, Kunming, China, 3 World Agroforestry Centre (ICRAF), Kunming, China, 4 Alterra, Wageningen UR, Wageningen, Netherlands
- No. 29 (A-109) Trends of crop productivity, income growth and upward mobility in Kenya**  
S. Mburu<sup>1</sup>  
 1 Tegemeo Institute, Egerton University, Nairobi, Kenya
- No. 30 (A-242) Which land use and agriculture in 2030 and for whose benefits?—27 visions of the Okavango River basin to navigate food production in the future**  
S. Domptail<sup>1</sup>  
 1 Justus Liebig University of Giessen, Institute for Agricultural Policy and Market Research, Giessen, Germany
- TOPIC B2** ■ **Trade-offs and synergies between climate mitigation and food security**
- No. 31 (A-115) A study on the ruminant (camel, sheep, goat) digestive diseases relative to waste management in Qatar**  
L. Cruz<sup>1</sup>  
 1 Veterinarian, Animal Nutrition, Manila, Philippines
- No. 32 (A-229) Beyond the cow, her calf, milk and manure: The increased net economic benefit of incorporating climate-smart technologies in the Rwandan One Cow per Poor Family programme**  
J. Kandulu<sup>1</sup>, T. Dusingizimana<sup>2</sup>, M. Chagunda<sup>3</sup>  
 1 University of Adelaide, Centre for Global Food and Resources, Adelaide, Australia, 2 Massey University, School of Food and Nutrition, Palmerston North, New Zealand, 3 University of Hohenheim, Animal Breeding and Husbandry in the Tropics and Subtropics (490h), Stuttgart, Germany
- No. 33 (A-217) Food insecurity experience and farmers' aspiration: An empirical analysis in Northeastern Ethiopia**  
M. Girma Mulat<sup>1</sup>, Anne Jerneck<sup>2</sup>, Asmare Dejen<sup>1</sup>  
 1 Wollo University, College of Agriculture, Dessie, Ethiopia, 2 Lund University, Center for sustainability Study, Lund, Sweden

- No. 34 (A-208) Experts' opinion on sustainable nutrition and possible impacts on health and future of agricultural systems in Switzerland**  
 C. Brombach<sup>1</sup>, S. Flückiger<sup>2</sup>, J. Sych<sup>1</sup>, S. Rohrmann<sup>3</sup>, K. Schneider<sup>4</sup>, C. Schader<sup>5</sup>  
 1 Zurich University of Applied Sciences, Institute of Food and Beverage Innovation, Waedenswil, Switzerland,  
 2 Zurich University of Applied Sciences, Institute of Natural Resources, Waedenswil, Switzerland,  
 3 University of Zurich, Chronic Disease Epidemiology, Biostatistics and Prevention Institute (EBPI), Zurich, Switzerland,  
 4 University of Zurich, Zurich, Switzerland, 5 Forschungsinstitut für Biologischen Landbau, Frick, Switzerland
- No. 35 (A-181) Effect of dietary red grape bagasse on the shelf life extension of veal from Galician Blond breed**  
 R. González<sup>1</sup>, G. García<sup>1</sup>, E. González<sup>1</sup>, M. C. García-Fontán<sup>1</sup>, R. Alonso-Abraldes<sup>1</sup>, T. Moreno<sup>1</sup>  
 1 Meat Technology Centre of Galicia, Galicia St. 4, San Cibrao das Viñas, 32900, Ourense, Spain
- No. 36 (A-170) Taste profiles of diets high and low on sustainability and health**  
 L. van Bussel<sup>1</sup>, A. Kuijsten<sup>1</sup>, P. van 't Veer<sup>1</sup>  
 1 Wageningen University, Human Nutrition, Wageningen, Netherlands
- No. 37 (A-166) PGPR inoculation of mungbean: Are there positive effects on nitrogen fixation under stress conditions?**  
 L. Pataczek<sup>1</sup>, J. Barroso<sup>1</sup>, T. Hilger<sup>1</sup>, Z. A. Zahir<sup>2</sup>, R. Schafleitner<sup>3</sup>, G. Cadisch<sup>1</sup>  
 1 University of Hohenheim, Institute of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Stuttgart, Germany, 2 University of Agriculture, Faisalabad, Institute of Soil and Environmental Sciences, Faisalabad, Pakistan,  
 3 The World Vegetable Center, Biotechnology and Molecular Breeding, Tainan, Taiwan
- No. 38 (A-162) Food-bioenergy integration in Brazil: Towards sustainable land use intensification**  
 N. Rinke Dias de Souza<sup>1</sup>, T. L. Junqueira<sup>2</sup>, O. Cavalett<sup>2</sup>, M. F. Chagas<sup>2</sup>, T. F. Cardoso<sup>2</sup>, M. Watanabe<sup>2</sup>, A. Bonomi<sup>2</sup>, J. A. Fracarolli<sup>3</sup>, L. Cortez<sup>4</sup>  
 1 University of Campinas, Food Engineering, Campinas, Brazil, 2 Brazilian Center of Research in Energy and Materials (CNPEM), Brazilian Bioethanol Science and Technology Laboratory (CTBE), Campinas, Brazil,  
 3 University of Campinas, Agricultural Engineering, Campinas, Brazil, 4 University of Campinas, Interdisciplinary Centre of Energy Planning, Campinas, Brazil
- No. 39 (A-152) Can spectroscopic and enzymatic proxies improve simulating the impact of climate change on soil organic matter?**  
 M. Laub<sup>1</sup>, N. Y. Funkuin<sup>1</sup>, R. S. Ali<sup>2</sup>, M. S. Demyan<sup>1</sup>, F. Rasche<sup>1</sup>, S. Blagodatsky<sup>1</sup>, G. Cadisch<sup>1</sup>  
 1 University of Hohenheim, Institute of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Stuttgart, Germany, 2 University of Hohenheim, Institute of Soil Science and Land Evaluation, Soil Biology Section, Stuttgart, Germany
- ~~**No. 40 (A-133) Exploring the potential of underutilized species in South America to increase incomes, reduce poverty and build resilience against climate change: Examples from Bolivia and Colombia**~~  
~~I. Fromm<sup>1</sup>~~  
~~1 Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences, Zollikofen, Switzerland~~
- No. 41 (A-240) Carbon neutrality and food security—a case study on coffee from Costa Rica**  
 A. Birkenberg<sup>1</sup>  
 1 University of Hohenheim, Stuttgart, Germany

**TOPIC B3**

**Adaptation to global social and environmental change:  
 Technical, digital and social innovations**

- ~~No. 42 (A-127) — **Assessing the role of pro-environmental motivations towards a sustainable food system**  
 A. A. Dipierri<sup>1</sup>, M. Hudon<sup>1</sup>, T. Dedeurwaerdere<sup>2</sup>  
<sup>1</sup> Université Libre de Bruxelles (ULB), CERMI, Brussels, Belgium, <sup>2</sup> Université Catholique de Louvain (UCL), Louvain, Belgium~~
- No. 43 (A-196) — Impact of root temperature regime on growth, photosynthesis and antioxidant enzyme activities in rice plants**  
 A. Pieters<sup>1,2</sup>, J. Hartmann<sup>1</sup>, S. Stuerz<sup>1</sup>, F. Asch<sup>1</sup>  
<sup>1</sup> University of Hohenheim, Institute of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Crop Water Stress Management (490g), Stuttgart, Germany, <sup>2</sup> Venezuelan Institute for Scientific Research, Centre of Ecology, Plant Ecophysiology Lab, Caracas, Venezuela
- No. 44 (A-198) — Health risk assessment of using treated wastewater for vegetables production under hyper-arid climate**  
 M. I. Hussain<sup>1</sup>, A. S. Qureshi<sup>2</sup>  
<sup>1</sup> University of Sharjah, P.O. Box 27272, Sharjah, U.A.E., Research Institute of Science and Engineering, Dubai, United Arab Emirates, <sup>2</sup> International Center for Biosaline Agriculture (ICBA), PO Box 14660, Dubai, U.A.E., Dubai, United Arab Emirates
- No. 45 (A-206) — Local solutions to local problems: Agroforestry systems contribution to communities' food and nutrition security in Southwestern Ethiopia**  
 D. Callo-Concha<sup>1</sup>, O. M. Jemal<sup>1</sup>, H. S. Aragaw<sup>2</sup>, H. Jaenicke<sup>1,3</sup>  
<sup>1</sup> Bonn University, Center for Development Research, Bonn, Germany, <sup>2</sup> Ethiopian Institute of Agricultural Research, Jimma Agricultural Research Centre, Jimma, Ethiopia, <sup>3</sup> Bonn University, INRES Horticulture / Horticulture Competence Centre, Rheinbach, Germany
- No. 46 (A-209) — Identifying tipping points in the supply of ecosystem services in a mountainous watershed in South-East Asia using spatially explicit modelling**  
 K. Thellmann<sup>1</sup>, M. Cotter<sup>1</sup>, G. Cadisch<sup>1</sup>, F. Asch<sup>1</sup>  
<sup>1</sup> University of Hohenheim, Institute of Agricultural Sciences in the Tropics and Subtropics (Hans-Ruthenberg-Institute), Stuttgart, Germany
- No. 47 (A-211) — The role of E-commerce on agri-food value chain and its implications for farmers in poor areas of China**  
 R. Gu<sup>1</sup>, F. Nie<sup>1</sup>, W. Zhang<sup>2</sup>, H. Zhu<sup>1</sup>  
<sup>1</sup> Chinese Academy of Agricultural Sciences, Beijing, China, <sup>2</sup> International Food Policy Research Institute, Washington, United States
- No. 48 (A-231) — ~~The impact of storytelling on the dissemination of food security~~  
**NEW TITLE: Communication strategies for food security: The powerful potential of storytelling**  
 L. P. Muench<sup>1,2</sup>  
<sup>1</sup> University of Edinburgh, School of Geosciences, Edinburgh, United Kingdom, <sup>2</sup> Scotland Rural College, Edinburgh, United Kingdom**
- ~~No. 49 (A-241) — **Can understanding gendered trait preferences for small ruminants to enhance adaptation efforts in low-input environments?**  
 J. Kariuki<sup>1</sup>, J. Ojango<sup>2</sup>, A. Galie<sup>2</sup>, R. Birner<sup>3</sup>  
<sup>1</sup> University of Hohenheim / ILRI, Stuttgart, Germany, <sup>2</sup> ILRI, Nairobi, Kenya, <sup>3</sup> University of Hohenheim, Stuttgart, Germany~~

- No. 50 (A-246)** **Meat consumption discourses—how much information is in it for decision makers? The case of ethical and sustainable poultry production in Germany**  
B. König<sup>1</sup>, B. Richter<sup>1</sup>, J. Heitlinger<sup>2</sup>, A. Kuntosch<sup>2</sup>  
 1 Humboldt-Universität zu Berlin, Thae Institute and IRI THESys, Berlin, Germany, 2 Humboldt-Universität zu Berlin, Thae Institute and IRI THESys, Berlin, Germany
- No. 51 (A-251)** **Value chain analysis of rice production for Kebbi State Staple Crops Processing Zone in Nigeria**  
E. Kwon-Ndung<sup>1</sup>, G. Ayoola<sup>2</sup>, L. Kwon-Ndung<sup>3</sup>  
 1 Federal University Lafia, Department of Botany, Lafia, Nigeria, 2 Farm and Infrastructure Foundation, Managing Director, Abuja, Nigeria, 3 Federal University Lafia, Political Science, Lafia, Nigeria
- No. 52 (A-193)** **A modeling framework for developing sustainable adaptation and mitigation strategies: Tackling the challenge of salinity and water scarcity in Asian Mega Deltas**  
P. Schneider<sup>1</sup>, F. Asch<sup>1</sup>, V. D. Nha<sup>2</sup>  
 1 University of Hohenheim, Management of Crop Water Stress in the Tropics and Subtropics (490g), Stuttgart, Germany, 2 Kien Giang University, Agriculture and Rural Development Faculty, Kien Giang, Viet Nam
- No. 53 (A-187)** **Improving egg production through small-holder business models**  
K. Kraemer<sup>1</sup>, S. Srujith<sup>2</sup>, K. Beesabathuni<sup>2</sup>  
 1 Sight and Life Foundation, Basel, Switzerland, 2 Sight and Life Foundation, Bangalore, India
- ~~**No. 54 (A-179)** **Crop farmers' adaptive capacity and resilience to water crisis in the North West of Iran**  
E. Karamidehkordi<sup>1</sup>, F. Safari<sup>1</sup>  
 1 University of Zanjan, Agricultural Extension, Communication and Rural Development Department, Zanjan, Islamic Republic of Iran~~
- No. 55 (A-128)** **Factors influencing pitaya (*Hylocereus* spp.) seed germination assessed with conventional and image analysis approaches**  
D. Zepa-Catanho<sup>1</sup>, A. Hernández-Pridybailo<sup>1</sup>, V. Madrigal-Ortiz<sup>1</sup>, Z.-C. Adonay<sup>1</sup>,  
C. Porrás-Martínez<sup>1</sup>, V. M. Jiménez<sup>1,2</sup>, L. Barboza-Barquero<sup>1</sup>  
 1 Universidad de Costa Rica, Centro para Investigaciones en Granos y Semillas (CIGRAS), San Jose, Costa Rica, 2 University of Hohenheim, Food Security Center, Stuttgart, Germany
- No. 56 (A-135)** **Assessing and increasing biodiversity in fruit orchards to support the sustainability of integrated production systems in Germany**  
K. L. Thiemann<sup>1</sup>, T. Rosenau<sup>1,2</sup>, A. Hamm<sup>2</sup>, J. Lorenz<sup>3</sup>, H. Jaenicke<sup>1,4</sup>  
 1 Bonn University, INRES Horticulture / Horticulture Competence Centre, Rheinbach, Germany, 2 Bonn University, INRES Agricultural Ecology and Organic Agriculture, Bonn, Germany, 3 Service Centre for Rural Areas, Rhineland Palatinate, Rheinbach, Germany, 4 Bonn University, Center for Development Research, Bonn, Germany
- No. 57 (A-137)** **Ecofunctional management strategies for *Diaphorina citri* on organic orange orchards**  
L. Forster<sup>1</sup>, C. Castillejos Cruz<sup>2</sup>, S. Garibay<sup>3</sup>  
 1 AGRECOL e.V., Guggenheim, Germany, 2 Universidad Nacional Autonoma de Mexico, Mexico City, Mexico, 3 FiBL, Frick, Switzerland
- No. 58 (A-156)** **Commons-based plant breeding and seed production as a social innovation to enhance resilience in the agricultural sector**  
L. Kliem<sup>1</sup>, S. Sievers-Glotzbach<sup>2</sup>  
 1 Institute for Ecological Economy Research (IÖW), Berlin, Germany, 2 Carl von Ossietzky Universität Oldenburg, Department für Wirtschafts- und Rechtswissenschaften, Oldenburg, Germany

**No. 59 (A-157) — Disseminating promising high-yielding tetraploid plantain bred hybrids in francophone West Africa**  
 Changed to oral presentation on 6 September at 12:30 pm in the room "Audimax"  
 A. Tenkouano<sup>1</sup>, N. Lamien<sup>1</sup>, J. Agogbua<sup>2</sup>, D. Amah<sup>3</sup>, R. Swennen<sup>4,5,6</sup>, S. Traore<sup>7</sup>, D. Thiemele<sup>7</sup>, N. Aby<sup>7</sup>, K. Kobenan<sup>7</sup>, G. Gnonhouiri<sup>7</sup>, N. Yao<sup>7</sup>, G. Astin<sup>7</sup>, S. Sawadogo-Kabore<sup>8</sup>, V. Tarpaga<sup>8</sup>, W. Issa<sup>8</sup>, B. Lokossou<sup>9</sup>, A. Adjanooun<sup>9</sup>, G. L. Amadji<sup>9</sup>, S. Adangnitode<sup>9</sup>, K. A. D. Igue<sup>9</sup>, R. Ortiz<sup>10</sup>  
 1-CORAF, Dakar, Senegal, 2-International Institute of Tropical Agriculture, Onne, Nigeria, 3-International Institute of Tropical Agriculture, Ibadan, Nigeria, 4-International Institute of Tropical Agriculture, Arusha, United Republic of Tanzania, 5-KU Leuven, Leuven, Belgium, 6-Bioversity International, Leuven, Belgium, 7-Centre National de Recherche Agronomique de Côte d'Ivoire, Abidjan, Côte d'Ivoire, 8-Institut de l'Environnement et de Recherches Agricoles, Ouagadougou, Burkina Faso, 9-Institut National des Recherches Agricoles du Bénin, Cotonou, Benin, 10-Swedish University of Agricultural Sciences, Alnarp, Sweden

**No. 60 (A-164) Thinking outside the CAP: Reducing domestic cattle farming as strategy for resilient food systems, in the context of Sweden's defence policy**

M. Augdoppler<sup>1,2</sup>

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**No. 61 (A-175) Acceptability of urine-enriched biochar in Bangladesh: a qualitative study**

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**No. 62 (A-254) Identification of Fusarium spp. infestation in winter wheat with RGB images**

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## Session C: Bioeconomy and food production

**TOPIC C1 Evaluation of policy instruments for sustainable food production and healthy nutrition**

**No. 63 (A-107) The impacts of land degradation on the socio-economic status of people in Khartoum state, Sudan**

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**No. 64 (A-136) Motivations for food choices—Results of a quantitative survey in Hungary**

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**No. 65 (A-184) Evaluation of the quality of fruit juices in the city of Yaoundé for the development of a quality management protocol**

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**No. 66 (A-232) Effects of Okra powder on bread quality**

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**TOPIC C2** ■ **New approaches in food design**

- No. 67 (A-159)** **Sustainable agri-value chain and production: The interplay of efficient resource use and energy systems in world's remote-areas**  
O. A. Amusan<sup>1</sup>  
 1 CPEEL University of Ibadan / Amiesol Resources Konsult / ERK GmbH, Ibadan, Nigeria
- No. 68 (A-176)** **A faster way to develop bread recipes through the application of iterative optimization algorithms**  
B. Hermanseder<sup>1</sup>, K. Bäuerle<sup>1</sup>, B. Hitzmann<sup>1</sup>  
 1 University of Hohenheim, Process Analytics and Cereal Science, Stuttgart, Germany
- No. 69 (A-226)** **Influence of solid fat content on textural and viscoelastic properties of emulsion gels**  
J. Dreher<sup>1</sup>, C. Blach<sup>1</sup>, M. Gibis<sup>1</sup>, J. Weiss<sup>1</sup>  
 1 University of Hohenheim, Stuttgart, Germany
- No. 70 (A-236)** **Combining biochar, biofertilizer and vermicompost for improved cacao (*Theobroma cacao* L) plant growth in acidic soil**  
N. Carnaje<sup>1</sup>, N. Aggangan<sup>2</sup>, M. Ang-Lopez<sup>1</sup>  
 1 University of the Philippines Visayas, School of Technology, Iloilo City, Philippines, 2 University of the Philippines Los Banos, BIOTECH, Laguna, Philippines
- No. 71 (A-255)** **Detection of pesticide in food samples using a novel biosensor based on graphene and acetylcholinesterase enzyme**  
I. Cesarino<sup>1</sup>, M. K. L. Silva<sup>1</sup>, A. L. Leao<sup>1</sup>  
 1 São Paulo State University (UNESP), School of Agriculture, Botucatu, SP, Brazil

**TOPIC C3** ■ **Sustainability advances for the production of high value food components**

- No. 72 (A-150)** **Effect of bio-fertilizer and organic fertilizer on yield and yield components of Cumin (*Cuminum Cyminum*) under drought stress**  
M. Amini Dehaghi<sup>1</sup>, F. Abedin<sup>2</sup>  
 1 Shahed University, Agronomy, Tehran, Islamic Republic of Iran, 2 Azade University, Karaj, Islamic Republic of Iran
- No. 73 (A-227)** **Improvement of antioxidant properties of veal from “Rubia Gallega” calves through the dietary inclusion of red grape marc**  
C. García-Fontán<sup>1</sup>, L. Rubio<sup>2</sup>, M. Lores<sup>2</sup>, R. González<sup>1</sup>, R. Alonso<sup>1</sup>, T. Moreno<sup>1</sup>  
 1 Meat Technology Center, Ourense, Spain, 2 University of Santiago de Compostela, Analytical, Nutrition and Bromatology, Santiago de Compostela, Spain
- No. 74 (A-247)** **The combined action of natural antimicrobials and high hydrostatic pressure on inactivation of different microorganisms: A review**  
F. Şahmurat<sup>1</sup>, Ayhan Duran<sup>1</sup>, A. Yüçetepe<sup>1</sup>, B. Özçelik<sup>2</sup>  
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