

Conference Time: July 24 - 26, 2024

Venue: University of Hohenheim, Stuttgart, Germany: Palace Hohenheim

Poster Session: 19 posters

Attendees: Max.100

Keynote speakers have time slots of 30 min, for a 25 min talk with a 5 min discussion

Oral presentations have a time slot of 20 min, for a 15 min talk with 5 min discussion

WEDNESDAY, JULY 24, 2024

From 12:00 Registration, setting up posters

13:00 Welcome by the Dean of the Faculty of Agriculture (**Ralf Vögele**) and Organizing Committee (**Karl Schmid**)

Session 1: Genetic Resources and Breeding. Chair: Karl Schmid. University of Hohenheim

13:15 Keynote Speaker: **Francisco Fuentes**, Pontifical Catholic University, Santiago, Chile,
Title: Quinoa Diversity and Genetics

13:45 **Katharina Böndel**, University of Hohenheim, Stuttgart, Germany
Title: Characterization of the genetic diversity and past domestication history of quinoa

14:05 **David Wu**, Shanxi-Agri Tech, China
Title: Jiaqi Quinoa Breeding Progress

14:25 **Davide Visintainer**, University of Copenhagen, Denmark
Title: A genome-wide association study of quinoa in controlled, root-restricted conditions

14:45 **Coffee Break and Poster Session I**

15:30 Keynote Speaker: **Gerda Cnops**, Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)
Title: From soil to shelf: Ensuring quality in local quinoa farming

16:00 **Harshith Annaram**, Plant Breeding Institute, Kiel University, Germany
Title: Breeding quinoa for cultivation in temperate regions

16:20 **Yuanyuan Li**, CAS Center for Excellence in Molecular Plant Sciences, Chinese Academy of Sciences, Shanghai 200032, China
Title: China's participatory quinoa breeding

16:40 **Masoumeh Salehi**, National Salinity Research Center, Agricultural Research, Education and Extension Organization (AREEO), Yazd, Iran

Title: Quinoa from research up to the market in Iran

17:00 **Jiemeng Xu**, Center for Desert Agriculture, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia

Title: Wild relatives provide valuable genetic resources to improve heat tolerance of cultivated quinoa (*Chenopodium quinoa Willd.*)

17:20 **Saima Rashid**, Department of Agronomy, University of Agriculture Faisalabad, Pakistan

Title: Genetic variability and phenotypic behavior of quinoa for heat stress tolerance

17:40 **Karl Schmid**, University of Hohenheim, Stuttgart, Germany

Title: Utilizing the native genetic diversity of quinoa to characterize seed germination

18:30 **Conference networking dinner in the Mensa of the University of Hohenheim**

THURSDAY, JULY 25, 2024

09:00 Keynote Speaker: **Viviana Jaramillo**, Radicle Crops, Wageningen, Netherlands

Title: Pioneering the Future of Quinoa for Global Agriculture

Session 2: Food & Nutrition, Chair: Nazgol Emrani, Kiel University

09:30 Keynote Speaker: **Didier Bazile**, Centre de coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)

Title: Novel Food Products using Quinoa

10:00 **Claudia Monika Haros**, Institute of Agrochemistry and Food Technology (IATA), Spanish Council for Scientific Research (CSIC), Valencia, Spain

Title: Comparative Analysis of Oil and Residual Cake Characteristics from Royal Quinoa Germ obtained by Dry and Wet Milling

10:20 **Coffee Break and Poster Session II**

11:05 **Natalie Feller**, Institute of Food Science and Biotechnology, Department of Plant-based Foods, University of Hohenheim, Stuttgart, Germany

Title: Saponin-enriched quinoa extracts as foaming agent to modulate gas retention in gluten-free food matrices

11:25 **Mai Duy Luu Trinh**, Department of Plant and Environmental Sciences, University of Copenhagen, Frederiksberg, Denmark

Title: Accelerating quinoa breeding through site-directed genotype screening reveals TSARL1 as a key regulator of saponin biosynthesis in quinoa seeds

11:40 **Raquel Iglesias Fernández**, Centro de Biotecnología y Genómica de Plantas-Severo Ochoa (CBGP, UPM-INIA), Universidad Politécnica de Madrid

Title: Dynamics of endo- β -mannanase gene expression during germination of *Chenopodium quinoa* seeds

12:30 **Lunch in Mensa of the University of Hohenheim**

Session 3: Biotic and Abiotic Stresses. Chair: Sandra Schmöckel. University of Hohenheim

13:45 Keynote Speaker: **Jeff Maughan**, Brigham Young University, USA

Title: Genomic resources to facilitate the agronomic improvement of quinoa

14:15 **Carla Colque-Little**, University of Copenhagen, Denmark

Title: Molecular identification of pathogenic mycobiome associated with quinoa foliar blotch disease and dark pigmentation on seeds

14:35 **Hassan Iqbal**, State Key Laboratory of Desert and Oasis Ecology, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi, 830011, China

Title: Improving Drought Tolerance Mechanisms in Quinoa: Exploring the Synergistic Effects of Salinity and Hydrogen Peroxide Applications

14:55 **Max Moog**, Department of Plant and Environmental Sciences, University of Copenhagen, Frederiksberg C, Denmark

Title: Epidermal bladder cells as a herbivore defense mechanism

15:15 **Coffee Break**

16:00 Keynote Speaker: **Helena Štorchová**, Institute of Experimental Botany, Czech Academy of Sciences, Prague, Czech Republic

Title: The structure and function of the *FLOWERING LOCUS T* like genes in *Chenopodium quinoa*

16:30 **Mieke van Vlaardingen**, Wageningen University

Title: Diverse Adaptations to Drought and Salinity: A Comparative Transcriptome Analysis of Two Quinoa Genotypes

16:50 **Sara Fondévilla**, Institute for Sustainable Agriculture, Consejo Superior de Investigaciones Científicas (CSIC), Córdoba, Spain

Title: Identification of candidate genes for downy mildew resistance in quinoa using Genome-wide Association Study combined with Bulk Segregant Analysis

17:10 **Victor Zevallos**, Department of Applied Sciences, Faculty of Health and Life Sciences, Northumbria University, Newcastle, UK

Title: Quinoa (*Chenopodium quinoa* Willd.) tolerates well induced drought stress

17:30 **Isaac Maestro-Gaitan**, Departamento de Biología, Universidad Autónoma de Madrid, Campus, Madrid, Spain

Title: Endophytic and rhizosphere bacterial communities in quinoa: changes in their composition associated to environmental and genetic factors.

17:50 **Lukas John**, Institute of Crop Science, Department of Physiology of Yield Stability, University of Hohenheim, Germany

Title: Investigating water deficit tolerance mechanisms in *Chenopodium quinoa* through a high-resolution transpiration phenotyping platform

19:00 **Dinner on your own**, for location suggestions see booklet

FRIDAY, JULY 26, 2024

Session 4: Field Visit

09:00 Visit of the field site

Horticultural Challenges

Trade Show & Demonstrations of Quinoa Biomass Valorization

Session 5: Quinoa Markets and Policies

11:00 Franziska Mittag, University of Hohenheim, Stuttgart, Germany

Title: The current international market for quinoa

11:20 Discussion: The future of quinoa as global crop

Short contributions by conference participants ("Open Mic")

Panel Speakers:

- **N.N.**
- President of the German Quinoa Association, **Karl Schmid**
- Previous Advisor to the FAO, **Didier Bazile**

12:00 Announcement of Poster Prizes

Official End of Symposium

12:30 **Lunch for participants**