



Current Challenges in Plant Breeding: Breeding for Planetary Health – Tackling Agriculture’s Grand Challenges

10th annual seminar of the SGPW-SSA Working Group on Plant Breeding

Wednesday, January 21, 2026, 09:15 - 17:00
ETH Zurich, LEE E101, Leonhardstrasse 21, 8092 Zurich

On behalf of the SGPW-SSA Working Group on Plant Breeding, we kindly invite you to attend the 10th annual working group seminar, this year with the title „Breeding for Planetary Health – Tackling Agriculture’s Grand Challenges“.

With an increasing human population, global food security remains one of the most important challenges for generations to come. At the same time, climate change, biodiversity and environmental pollution are central topics of public debate, each shaped by – and, in turn, shaping – agriculture and food systems. In this seminar, we would like to think out-of-the-box and explore how plant breeding can contribute to addressing these challenges through research and innovations that support sustainable solutions.

The specific topics that will be covered are:

- Breeding for global food security – exploring novelties while maintaining productivity
- Breeding for biodiversity – maintaining and promoting biodiversity
- Breeding for net-zero agriculture – reducing emissions in production
- Breeding for input-efficient agriculture – reducing mineral fertilizer and pesticides input

This seminar is part of the ETH Zurich lecture “Current Challenges in Plant Breeding”, where we aim to bring together MSc and doctoral students with national and international experts in plant breeding. Therefore, the students will present their ideas and perspectives on the above mentioned topics. In addition, we have assembled a selection of very interesting keynote presentations by eminent speakers such as: Hans-Joachim Braun (formerly CIMMYT, Mexico), Marianne Bänziger (formerly CIMMYT, Mexico), Ian Donnison (University of Aberystwyth, UK) and Edward Buckler (USDA / Cornell University, Ithaca NY, USA).

We are looking forward to an interesting seminar.

Best regards,

Bruno Studer, Andreas Hund and Roland Kölliker

Program

09:15 - 09:30	Arrival and registration
09:30 - 09:40	Welcome and introduction Bruno Studer, ETH Zurich
09:40 - 10:25	Wheat breeding for global food security – exploring novelties while maintaining productivity Hans-Joachim Braun, form. CIMMYT, Mexico
10:25 - 10:45	Breeding for global food security Salome Gebendinger, Alexander Konvalina, Maurine Messmer, Andri Spirig (tutor: Corina Oppliger, ETH Zurich)
10:45 - 11:15	Coffee break
11:15 - 11:35	Breeding for biodiversity Chiara Heiss, Milo Mattei, Cyril Studach (tutors: Laura Mathieu & Samuel Wuest, Agroscope)
11:35 - 12:20	Breeding for biodiversity Marianne Bänziger, form. CIMMYT, Mexico
12:20 - 12:40	Breeding for net-zero agriculture Erika Keiser, Yuzhuo Pang, Philipp Stettler (tutor: Damian Käch, ETH Zurich)
12:40 - 14:10	Lunch in the Mensa Polyterrasse of ETH Zurich
14:10 - 14:55	Breeding for resilient and net-zero agriculture Iain Donnison, IBERS, Aberystwyth University, UK
14:55 - 15:15	Breeding for input-efficient agriculture Shem Fumey, Andrea Ghigi, Xinyu Kou (tutors: Hans Dätwyler & Mathieu Deblicq, Swiss Plant Breeding Center)
15:15 - 16:00	Breeding for input-efficient agriculture Edward Buckler, USDA, Cornell University, NY, USA
16:00 - 16:20	Breeding for the swiss agriculture and food system Hans Daetwyler, Swiss Plant Breeding Center
16:20 -	Reception

Registration

Please register before 14.01.2026 under <https://sgpw-ssa.ch/de/events/ccpb>. Registration fee: 50.00 CHF (including coffee break, lunch voucher and reception), to be paid by invoice after the symposium.

Kindly supported by

