Boosting technology transfer and responsible research and innovation (RRI) in plant sciences

Dear PlantHUB partner,

We are proud to present the first newsletter of the PlantHUB programme.
The newsletter will provide you with information about the PlantHUB outreach activities, upcoming events and training opportunities as well as recent achievements, latest publications and important forthcoming activities related to the PlantHUB programme.

We hope this newsletter will keep you informed of state-of-the-art developments within PlantHUB.

You are most welcome to distribute this newsletter within your network.

Kind regards,

Manuela Dahinden and Romy Kohlmann
PlantHUB programme office

PlantHUBNews 1_2019
Webversion

I. PlantHUB Outreach

Fascination of Plants Day 2019

The fifth international "Fascination of Plants Day" was launched by plant scientists across the world under the umbrella of the European Plant Science Organisation (EPSO).

Across PlantHUB several events took place with the goal to get as many people as possible fascinated by plants and enthused about the importance of plant sciences.

In collaboration with scientists from Prof Bruno Studer´s research group at ETH Zurich the PlantHUB programme office organized seven "Genome Editing" Discovery Workshops for together 145 pupils in senior classes at schools in and around Zurich. The workshops aimed at teaching school students on how to use the cutting-edge CRISPR/Cas9 method in the context of increasing genetic diversity in agriculture.

PlantHUB fellow Florian Cueni from the University of Basel performed a Discovery Workshop on climate change at a secondary school near Basel. Together with 25 school students Florian Cueni measured and described the impact of drought on the physiology of plants using simple experiments.

DSV Zaden Netherlands has participated in a series of interactive activities in a large green house on the Plein in Den Haag with fascinating stories about plants and seeds.

All PlantHUB activities under the umbrella of the Fascination of Plants Day 2019 have been summarized in the PlantHUB deliverable D25, published in July 2019 by the PlantHUB programme office.

Download PDF

ETH open lab day - tools and technology to advance plant breeding

At the AgriTech Day on 25 May 2019, the ETH - Research Station for Plant Sciences opened their doors to the public under the motto "Agriculture of the future - digital and sustainable?" At numerous attractions, demonstrations and forums discussions, visitors discovered innovative tools to support a more sustainable Swiss agriculture.

In the frame of this Open lab day PlantHUB fellows Maximilian Vogt and Claudio Cropano from the Molecular Plant Breeding group of Prof Bruno Studer presented their doctoral projects on improving the breeding of perennial ryegrass.

The activities at the AgriTech Day have been summarized in the PlantHUB deliverable D26, published in July 2019 by the PlantHUB programme office.

Download PDF

Panel discussion: What next after the ECJ judgement on gene editing?

About 80 participants of the TNAM 2019 conference take a tri-national view on the main issues and potential consequences of the ruling of the European Court of Justice (ECJ) on organisms obtained by mutagenesis.
https://www.tnam2019.ethz.ch/

Invited panel guests:
- Prof. Holger Puchta, Karlsruhe Institute of Technology, Germany
- Franziska Schwab, Small Farmers Association, Switzerland
- Prof. em. Jean-Marc Neuhaus, Institut de Biologie, Université de Neuchâtel, Member of the Swiss Ethics Commission for Non-Human Biotechnology
- Prof. Matthias Mahlmann, Faculty of Law, University of Zurich, Member of the Swiss Ethics Commission for Non-Human Biotechnology
- Dr. Ortrun Mittelsten Scheid, Gregor Mendel Institute of Molecular Plant Biology, Austria

The discussion took place on 11 April 2019 at ETH Zurich and was chaired by the journalist Mr Andreas Hirstein, Neue Zürcher Zeitung (NZZ), head of science desk at NZZ am Sonntag (NZZ on Sunday).

The discussions were held in German and have been summarized in English including additional background information to enable readers to follow the references in the discussions:

Download PDF

Summer School Proceedings

During the PlantHUB Summer School from 10-14 September 2018 in Einsiedeln, Switzerland the PlantHUB fellows implemented the responsible research and innovation framework (RRI) of the European Union in exemplary research fields of plant sciences, including plant breeding, smart farming, digitalization in agriculture or genome editing (CRISPR/Cas-method).

During Case study work they reflected on a science-in-society research process.
Invited speakers gave insight into their research field, conduct interactive workshops and took part in discussions. They acted as mentors in the case studies group work. These case studies will be available soon as summer school proceedings.

Read more

II. Upcoming Events

Scientifica 2019 - the largest public science fair in Switzerland

30 August - 1 September 2019

ETH Zurich and University of Zurich, CH
31 August 2019
16:00 – 17:00 at the University of Zurich (KOL E 18)
Superfood? Frankenfood? Panel discussion beyond the controversy

Our food should be tasty and healthy, look beautiful, be available all-year-round, protect our wallet and the environment. This is difficult to reconcile.
Plant breeding can make a significant contribution to this, e.g. with varieties that need less pesticides.
New molecular genetic methods - such as the CRISPR / Cas9 - could accelerate the development of such varieties. However, this is discussed controversially and considered critically.
At this workshop, we listen to each other:

- What do we know about the different methods of genome editing?
- What hopes do we associate with these technologies and what kind of reservations?
- What roles do facts play in the discussion and how can we conduct a differentiated dialogue?

Together with the participants, three experts will reflect on these and other questions from different perspectives:
Bruno Studer (ETH Zurich)
Angela Bearth (ETH Zurich)
Martin Rufer (Swiss Farmer's Union)

Read more

DSV open field days at the breeding station in Van Zelderheide (NL)

3 September 2019

The Innovation Day will take place on 3 September 2019 at DSV laden in Ven-Zelderheide

Read more

PlantHUB Annual Meeting 2019

19 November – 20 November with arrival on Monday 18 November 2019

Carlsberg Research Laboratory, Copenhagen, Denmark

PlantHUB Final Symposium 2020

November 2020 (tbd)

III. Upcoming Training

Open Science Course

Spring 2020 (tbd)

Outlook of the two-day workshop on Open Science and Open Data

Day 1:
(0.5 days, Melanie Paschke, PSC)
Introduction to Open Data
Data Management Plan
FAIR data principles and standards
Institutional open data storage
Open Licensing

0.5 days,
Workshop: Data Ecosystem Mapping

Day 2:
Open Access Publication, Data Rich Publications (N.N., UZH) / 0.5 days

0.5 days, self-tutorials in FOSTER:
(2) Recommended: The open innovation accelerator (2 hours)
(3) Recommended: The open access author (2 hours)

Read more

IV. Publications

Latest publications

Camilo Ching et.al. have published in July 2019 the following article in Forests:
"Latitude and Weather Influences on Sun Light Quality and the Relationship to Tree Growth"
Camilo Chiang, Jorunn E. Olsen, David Basler, Daniel Bånkestad, Günter Hoch

Forests 2019, 10, 610; doi:10.3390/f10080610

Read more

This project receives funding from the European Union's Horizon 2020 research and innovation program under the Marie Sklodowska-Curie grant agreement No 722338 – PlantHUB

Contact details:

Zurich-Basel Plant Science Center
Tannenstrasse 1
8092 Zürich
www.plantsciences.ch

Dr. Manuela Dahinden
Romy Kohlmann
manuela.kohlmann@usys.ethz.ch
Tel. +41 44 632 67 96

© 2019 Plant Science Center

Privacy Policy

If you do not want to receive this newsletter, please unsubscribe here.