



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

CPZZ gcaftfaggt fegtoctctc atlgaccasa gcttacttca gaaagggac tgcctgtfag aggttgaag agletcgar tgcctaaaccc gctttgaaa agdgtctct taktacacgc agtgpastc  
 Hgza gtttgaat gaaftgcaztt tctacttacc agagagag aaagattng ttaaccggt gcttctgact ttccttcaag gttgacacgc accaccagta tctgaacthg atgtaccoc agtaccac

Dear PlantHUB partner,

Our 4-year PlantHUB doctoral programme at the interface of academia and industry has been finalized recently. Programme-wide networking and integration activities initiated further collaborations, including 5+ follow-up collaborations and 4+ joint research proposals submitted to Horizon 2020. Moreover, the successful collaborations resulted in nine co-authored Open Access peer-reviewed publications and further 14 manuscripts in preparation as well as 44 joint dissemination and public engagement activities. Overall, the PhD students participated in a total of 177 training activities and presented their research projects at 25 international conferences.

We could not organize any of this without you, and for that, we want to thank you in the warmest possible way. Continuing working with you will definitely be a remarkable result of the PlantHUB programme!

With this newsletter we would like to give you an overview of the latest achievements, publications and deliverables.

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

Kind regards,

Manuela Dahinden and Romy Kohlmann  
 PlantHUB programme office

PlantHUBNews 1\_2021  
 Webversion

### Video Statements

It was planned to present the outcomes of the PlantHUB fellowships at the Plant Biology Europe conference in Torino last year. Due to the Covid-19 pandemic the conference was cancelled and we decided to record instead individual video statements highlighting the results of each of the PhD projects.

With the help of the ETH Multimedia service, a freelance science journalist Dr. Cornelia Eisenach and directed by the PlantHUB programme office, the PhD students were interviewed and recorded in September 2020.



In their statements they talked about:

- the scientific aims of their PhD projects;
- their research approaches and the challenges which came across;
- the differences they perceived between working in academia and working in industry;
- the way they benefited from the industrial-academic cooperation;
- the benefits of the additional training offered by the PlantHUB programme;
- how the industrial-academic collaboration influenced their future career outlook, etc.

The eight individual video statements will be published at CORDIS, the EU research results webpage as well as at the PlantHUB website.

The videos will be completed by the end of April 2021 at the latest and we will inform you accordingly.

### Latest Publications

Vogt, M.; Yates, S.; Sykes, T.; Luesink, W.; Koch, M.; Studer, B. Developing Heterotic Groups for Successful Hybrid Breeding in Perennial Ryegrass. *Agronomy* 2020, 10, 1410.

[Read more](#)

Claudio Cropano, Iain Place, Chloé Manzaneres, Javier Do Canto, Thomas Lübberstedt, Bruno Studer, Daniel Thorogood (2021). Characterisation and practical use of self-compatibility in outcrossing grass species. *Annals of Botany* 2021.

[Read more](#)

Seydina I. Diop, Oliver Subotic, Alejandro Giraldo-Fonseca, Manuel Waller, Alexander Kirbis, Anna Neubauer, Giacomo Potente, Rachel Murray-Watson, Filip Boskovic, Zoe Bont, Zsofia Hock, Adam C. Payton, Daniel Duijsings, Walter Pirovano, Elena Conti, Ueli Grossniklaus, Stuart F. McDaniel and Peter Szovenyi (2019). A pseudomolecule-scale genome assembly of the liverwort *Marchantia polymorpha*. *The Plant Journal*.

[Read more](#)

Sabrina Flütsch, Arianna Nigro, Franco Conci, Jiří Fajkus, Matthias Thalmann, Martin Třítlek, Klára Panzarová and Diana Santella (2020). Glucose uptake to guard cells via STP transporters provides carbon sources for stomatal opening and plant growth. *EMBO Reports*, vol. 21: no. 8, pp. e49719, Weinheim: Wiley, 2020.

[Read more](#)

Chiang, C.; Bänkestad, D.; Hoch, G. Reaching Natural Growth: Light Quality Effects on Plant Performance in Indoor Growth Facilities. *Plants* 2020, 9, 1273.

[Read more](#)

Chiang, C.; Bänkestad, D.; Hoch, G. Reaching Natural Growth: The Significance of Light and Temperature Fluctuations in Plant Performance in Indoor Growth Facilities. *Plants* 2020, 9, 1312.

[Read more](#)

In total, the successful collaborations during the PlantHUB programme resulted in **nine co-authored Open Access peer-reviewed publications so far and +14 manuscripts** are currently under revision or in preparation. The entire list of all PlantHUB publications is also available at CORDIS, the EU research results webpage.

### New Public Deliverables

#### Stakeholder & public engagement activities

Every PlantHUB doctoral student was invited to act as ambassador to promote its research field and the PlantHUB programme. In this deliverable all stakeholder and public engagement activities from the PlantHUB doctoral students between 2017 and 2020 are listed. In total **44 stakeholder and public engagement activities** have been conducted.



[Download PDF](#)



#### Participation at industry fairs

The participation at industry fairs or workshops allowed the PlantHUB doctoral students to directly engage with different stakeholders and to gain an understanding of their interests and concerns about molecular plant breeding and plant production as well as consumer needs.

Moreover, the PhD students could expand their industrial network and increase their future career choices. This deliverable presents all industry fairs and workshops the PlantHUB doctoral students participated between 2017 and 2020.

[Download PDF](#)

### PhDs awarded

At the end of the PlantHUB programme three PhD students already defended their doctoral thesis.



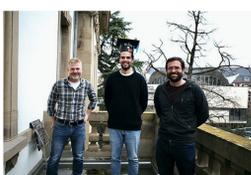
Congratulation to Camilo Chiang, who successfully defended his PhD on September 10th 2020 at the University of Basel. His thesis on the effects of light quality and climate fluctuations on plant performance in indoor cultures, has already resulted in two accepted publications. During his PlantHUB fellowship he worked together with Heliospectra, a company specialized in intelligent lighting technology for plant research in Sweden.



Claudio Cropano successfully defended his PhD on December 11th 2020 at the ETH Zurich. We congratulate him on his comprehensive thesis on the genetics of self-compatibility in perennial ryegrass. Claudio can directly use the experience from his industrial doctorate in collaboration with ETH Zurich and Deutsche Saatveredelung AG, a plant breeding company in Germany, for his new and exciting position as a Plant Geneticist at Puregene AG, Switzerland



We also congratulate Florian Cueni, who successfully defended his PhD on December 17th 2020 at the University of Basel. His research was directed at improving efforts to counter food fraud in agricultural products using stable isotopes, and was done in collaboration with Agroisolab GmbH in Jülich, Germany.



The remaining five PhD defences are planned for spring/summer 2021. All defended doctoral thesis will be open access available at the repositories from ETH Zurich, University of Zurich and University of Basel.

### Upcoming Events



#### De-novo-Domestikation: Erforschung und Erschließung pflanzengenetischer Ressourcen

June, 2nd 2021 online via Zoom (in German only)

Programme available [here](#).

Recent technological advances enable the de-novo-domestication of wild plants. Experts from plant sciences and from practice will present examples and possible applications. Together we will discuss the relevance of genome research and genome editing for plant breeding, sustainable plant production and agrobiodiversity.

The aim of the conference is to make existing initiatives visible and to find synergies. The conference is aimed at specialists from research, consulting, teaching, associations, administrative units and media professionals.

[Register here](#)

**Save the date!**

#### PSC Symposium 2021: Patterns in Nature and Plant Sciences

December 8th, 2021 ETH Zurich, Audimax

Each year the PSC organizes a scientific symposium that focuses on a major topic in plant sciences. During the conference, invited scientists from around the world interact with the PSC scientific community. Detailed information on this year's PSC symposium will be posted [here](#).



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

#### Contact details:

Zurich-Basel Plant Science Center  
 Tannenstrasse 1  
 8092 Zurich  
[www.plantsciences.ch](http://www.plantsciences.ch)

Dr. Manuela Dahinden  
 Romy Kohlmann  
[romy.kohlmann@usys.ethz.ch](mailto:romy.kohlmann@usys.ethz.ch)  
 Tel. +41 44 632 47 96

© 2021 Plant Science Center

[Privacy Policy](#)

If you do not want to receive this newsletter, please unsubscribe [here](#).