



Please insert here at least one **PHOTO** of your traineeship stay abroad! Preferred motives are photos of your accommodation, of your work place, of being at work. Attention! Due to legal considerations we kindly ask you to send us only photos that have been taken by yourself!



Field trial in greenhouse with approx. 650 pots



Wild barley under waterlogging conditions



Seperating plants in the greenhouse



Preparing the plants for the RGB-scanner



Measuring the biomass



Determination of biomass: teamwork at UCD Rosemount Environmental Research Station: Patrick Langahn (PhD), Joey Henchy (research assistant), Colm Ruden (master student)

STUDENT DETAILS

University department / faculty:

Naturwissenschaftliche Fakultät III - Agrar- und Ernährungswissenschaften, Geowissenschaften und Informatik

Field of study:

Image based phenotyping and production check trial using HEB-25 progenitors to assess waterlogging

Home university:

Martin-Luther-Universität Halle-Wittenberg

Nationality:

German

Duration of traineeship (*from ...to...*):

April 1st to October 1st 2021

TRAINEESHIP INSTITUTION

Country:

Dublin

Name of traineeship institution:

UCD_rosemount environmental research station

Web page:

<https://rosemount.ucd.ie/>

Address:

**UCD Rosemount Environmental Research Station,
University College, Belfield
Dublin, Ireland.**

Contact person:

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EXPERIENCE REPORT (*approx. 3 pages + more photos if applicable*)

1) Traineeship institution

Please give a brief description of your host traineeship institution.

Host organization of my traineeship has been UCD Rosemount Environmental Research Station in Dublin, Ireland, that is very similar to the agricultural research institute "Julius Kuehn-Feld" at University of Halle a. d. Saale, Germany. Rosemount Environmental Research Station is equipped with laboratories, greenhouses

and other research facilities to support PCD-students and PostDocs to gain first experiences in agricultural field research.

2) Searching for a traineeship

How did you find your traineeship? Are there any recommendable links or other helpful tips you would like to share?

I was supported by University of Halle, in particular by the professorship, where I wrote my bachelor thesis.

3) Preparation

How did you prepare for your traineeship in terms of language, intercultural, professional and organisational aspects? Are there any recommendable links or other helpful tips you would like to share?

Before starting my traineeship I got familiar with the research topic in general, especially with the consequences of climate change on barley production.

4) Accommodation

How did you find your accommodation? Are there any recommendable links or other helpful tips you would like to share?

Teammates at Rosemont research station helped me to find an appropriate apartment.

5) Traineeship

Please describe the tasks and / or the projects carried out during your traineeship. In which way were you mentored and integrated? How were the working conditions? Did you have especially positive or negative experiences?

I was supposed to plan and run an agricultural field trial "end-to-end". In particular: (1) preparing the greenhouse and bringing out the seeds, controlling and monitoring the plants under different agricultural conditions (waterlogging vs. normal water supply). My task was to check the growth of 30 lines under control and water stress conditions. For this we scanned the lines every day for 30 days with a so called PSI instrument (Photon Scanner). It contains three chambers: fluorescence camera, RGB camera for red, green and blue pixels and a hyperspectral chamber. After the 30 days we measured the biomass of the plants. Additionally we conducted another experiment with the same plants where we scanned the yield. Beside this I have also grown the same lines to do a seed breeding to perform a control trial.

The trial aimed to get data about different aspects of plant growths. The analysis of the data will be the foundation for my Master thesis.

6) Acquired qualifications

Which qualifications and skills could you acquire or improve during your traineeship?

I was able to enhance my theoretical knowledge with practical experiences. I already gained some experiences in supporting a field study at my home university; at Rosemont I was able to plan and conduct a field study end-to-end, learning how to do it, what to avoid etc. Additionally I learnt to perform such a study in an intercultural team!

7) Country-specific features

Are there any specific traineeship regulations in the target country that affected you as an Erasmus trainee (e.g. France: housing allowance, convention de stage? If yes, which ones? Are there any recommendable links or other helpful tips you would like to share?

Apart from Corona restrictions there have been no other regulations in place at UCD.

8) Visa, residence and work permit (only for international students)

Which prearrangements had to be made in terms of visa, residence and work permit? Are there any recommendable links or other helpful tips you would like to share?

There have been no prearrangements.

9) Other

Is there anything else you want to let other students know?

n.a.

10) Conclusion

What is the conclusion drawn after your traineeship experience abroad?

I was able to learn a lot. Especially I could enhance my theoretical knowledge and at the same time gain practical experience. I managed a project on my own, although I only have a bachelor's degree. For me, the time at Rosemont was a tremendous gain personally and practically, that I would not like to miss!

Declaration of consent

I hereby agree to the publication of this report on the website of the Leonardo Office Saxony-Anhalt.

I assure that the photos used in this report do not violate the rights of other persons or companies (personal rights, copyrights etc.).

Please send this report by email to angela.wittkamp@ovgu.de!
Acceptable file formats: [.doc], [.docx], [.rtf], [.odt].