

Call for Master thesis:

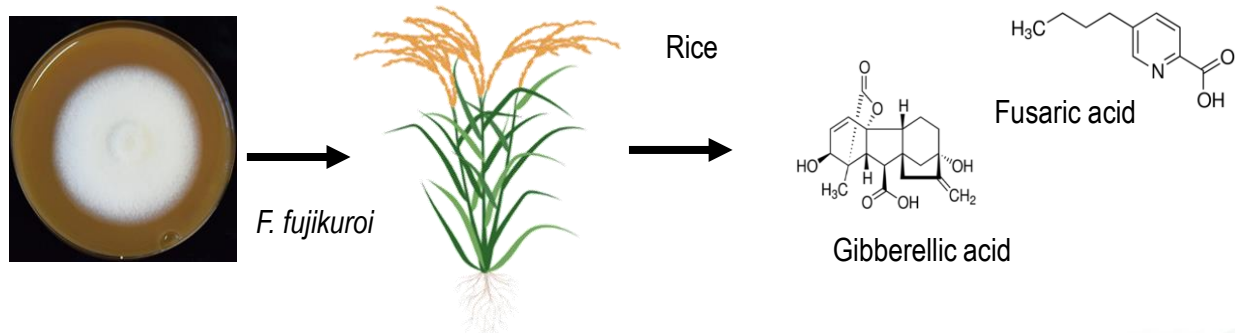


Establishment of an inducible silencing system to study the fungal histone variant H2A.Z



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Fusarium fujikuroi belongs to one of the economically most notable phytopathogens worldwide, causing the notorious 'bakanae' disease on rice seedlings. During the infection process noxious metabolites are synthesized and released by the fungus, impairing plants health and threatening food security. To develop sustainable and efficient strategies to constrain fungal plant diseases it is important to understand the underlying mechanisms influencing their gene expression. In all eukaryotes DNA-dependent processes, depends on the chromatin landscape and its modification. In this work we will study, the histone variant H2A.Z, which is believed to modify chromatins availability. Since H2A.Z is essential in *Fusarium* species, we will establish the inducible Tet-On and Tet-Off system to study the influence of the histone variant on fungal development, secondary metabolism and virulence and draw a comparison of both systems applicability.



We are looking for:

- Student familiar in the field of Biotechnology, Microbiology, Biochemistry or relating studies
- Highly motivated student who is curious of working with plant pathogens
- Ability to work independently under supervision

We offer:

- Modern infrastructure and a very friendly working environment ;)
- Learning of various techniques including
 - *In silico* cloning
 - Fungal phenotyping
 - Western Blot, RT-qPCR
 - Rice infections etc....
- **By the successful complementation to be part of a scientific publication**
- **Travel expenses to Tulln will be refunded**

Facts:

Duration: 6 months

Start: ideal October/November 2020

Location: UFT-Tulln AG Strauss

If you are interested, please send your CV to Anna Atanasoff-Kardjalieff

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