



Postdoc Position

Promotion of growth and stress resistance of field-grown maize by arbuscular mycorrhiza symbiosis

A Postdoc position (income level German TVL E13) is available for 3 years starting in February 2016 in the lab of Caroline Gutjahr at the Biocenter of the University of Munich (LMU), Germany.

The Postdoc will investigate growth, drought stress resistance and transcriptional responses to arbuscular mycorrhiza (AM) of European maize varieties in the field and greenhouse with the final aim to find quantitative trait loci that determine the amplitude of the response. AM is a symbiosis between plant roots and fungi of the phylum Glomeromycota, which is based on the exchange of nutrients: The fungus receives organic carbon from its host and in turn provides mineral nutrients and especially phosphate to the plant. The symbiosis has also been associated with enhanced plant resistance against abiotic stresses such as drought, salinity or temperature extremes. Due to resulting benefits for plant growth the symbiosis is of great interest to application in sustainable agriculture. The project will be conducted in collaboration with the plant breeding lab of Chris Carolin Schön at the Technical University of Munich. It is embedded into a Bavarian research consortium "KlimaFit" that investigates the genetic and physiological basis of stress resistance in plants to provide information for breeding of crops that resist abiotic stress resulting from climate change.

We are looking for a strongly motivated candidate with a PhD in a field related to plant biology, agriculture or horticulture. The candidate should be intellectually independent, experimentally accurate, have good management skills and be able to plan and conduct research independently. Experience/background in field work, plant breeding, statistics, quantitative genetics and/or maize genetics is an advantage. Good writing and communication skills in English are a must, knowledge of German is an advantage.

Information about the Gutjahr lab can be found here:
<http://www.genetik.bio.lmu.de/research/gutjahr/index.html>

Please send your application including your CV, your list of publications, the names of two referees and a motivation letter stating why you are interested in the topic and why you would be the right candidate to make progress in the field by email to:
caroline.gutjahr@lmu.de

Applications will be accepted until **20th of December 2015**.