GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN IN PUBLICA COMMODA SEIT 1737

Fakultät für Agrarwissenschaften
Department für Nutzpflanzenwissenschaften

Abteilung Pflanzenernährung und Ertragsphysiologie
Dr. Marcel Naumann

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Announcement for Bsc/MSc Thesis

"The effects of different N fertilizer treatments and potato cultivars on soil microbial communities"

Background and objectives:

The use of fertilizers has played a crucial role in increasing food production worldwide. The project POTENZIO^{N} (*Potentials to increase nutrient efficiency and reduce nitrogen emissions in starch potatoes*) study the potential of reducing N fertilizer application while maintaining proper quality of different potato cultivars. The application of fertilizer may also have influence on soil microbial community structure or abundance that potentially affecting soil fertility and long-term sustainability. The study aims to investigate the influence of different N fertilizer treatments and potato cultivars on three soil microbial domains, focusing on three key domains: archaea, bacteria and fungi.

Methodology:

The topic requires an interest in working with basic molecular techniques, e.g. soil DNA extraction, transformation, cloning, PCR and qPCR (for quantification of microbial domains). Basic knowledge of data handling with programs like R is required.

Requirement for candidates:

We are looking for motivated and responsible student to join our project for a bachelor or master thesis. Attention to detail and precision in conducting laboratory work. Willingness to handle repetitive tasks, especially when dealing with potentially large numbers of samples.

Starting point:

A possible start date for the thesis could be early 2024.

For further information, please contact:

Dr. Marcel Naumann
E-Mail: marcel.naumann@agr.uni-goettingen.de
Tel.: 0551 39-25565

Shiwei Li
E-Mail: shiwei.li@uni-goettingen.de
Tel.: 0551 39-4471