



PhD candidate on effector-driven breeding for resistance to *Verticillium* in potato

This PhD position is available at WUR Plant Breeding, Wageningen University & Research, Wageningen, The Netherlands.

Research description

The interaction of pathogen effectors and plant immune receptors is key to understanding disease resistance. We are exploiting a collection of wild *Solanum* species to identify and characterize resistance genes to potato pathogens, by functional screens with effectors. This effectomics approach was pioneered for *Phytophthora infestans* and has led to a catalogue of avirulence genes and their matching resistance genes.

In the framework of a TKI project entitled '**Identifying and characterizing *Verticillium* resistance in potato**', a position for a PhD candidate is available. In this project, we aim to identify and characterize genetic resistance against *Verticillium* wilt in *Solanum* accessions, by exploiting an effectomics strategy combined with modern sequencing technologies. This public private partnership project is funded by a four different potato breeding companies. The research will make use of the facilities and resources we have available at WUR and we will collaborate with other academic groups within and outside WUR.

PhD candidate

We are looking for an enthusiastic PhD candidate who is experienced in molecular plant-microbe interactions, genetics, bioinformatics and has affinity with plant phenotyping. Preferred candidates have very good teamwork abilities and a high level of oral and written English.

We offer a 4-year PhD position starting from 1 May, or at the earliest convenience. The PhD student will become part of a team that includes other PhD students, postdocs, and research technicians. The PhD student will also participate in the graduate school Experimental Plant Sciences, which offers opportunities for courses supporting scientific as well as personal and professional development.

Applications

If you are interested in this position, please apply by sending your motivation letter, CV and contact details of two references to Vivianne Vleeshouwers (vivianne.vleeshouwers@wur.nl), Plant Breeding, Wageningen University & Research. Applications will be considered until a suitable candidate has been identified. For more information regarding this position, please contact Vivianne Vleeshouwers (vivianne.vleeshouwers@wur.nl).