

The root microbiome and plant health

Corné M.J. Pieterse¹, Giannis Stringlis¹, Ke Yu, Gilles Vismans¹, Yang Song¹, Kirstin Feussner², Ivo Feussner², Ronnie de Jonge¹, Roeland L. Berendsen¹ and Peter A.H.M. Bakker¹

¹Plant-Microbe Interactions, Department of Biology, Utrecht University, the Netherlands

²Plant Biochemistry, Albrecht von Haller Institute, University of Göttingen, Germany

C.M.J.Pieterse@uu.nl; www.uu.nl/en/research/plant-microbe-interactions

Short bio Corné Pieterse

Plant-Microbe Interactions group, Utrecht University, the Netherlands

E-mail: C.M.J.Pieterse@uu.nl

Web: <http://www.uu.nl/en/research/plant-microbe-interactions>

Google Scholar: [LINK](#)

Personal page: <http://www.uu.nl/staff/CMJPieterse>



Corné Pieterse (1964) is professor Plant-Microbe Interactions and scientific director of the Institute of Environmental Biology of the Faculty of Science. His research group investigates how the plant immune system protects plants against microbial pathogens and insect herbivores, and how beneficial microbes in the plant root microbiome stimulate plant growth and health. Current research is focused on plant-beneficial functions that are encoded by the root microbiome, the role of plant genes that aid in maximizing profitable functions from the root microbiome, and crosstalk between plant defense hormones. With his research he aims to contribute to grand societal challenges, such as food security and sustainable agriculture.

Curriculum vitae

Corné Pieterse studied Plant Breeding and Plant Molecular Biology at the Wageningen University where he graduated *cum laude* in 1988. He performed his PhD research in Wageningen on the molecular basis of pathogenicity of the potato late blight pathogen *Phytophthora infestans*. After obtaining his PhD degree in 1993, he moved to Utrecht University to join the lab of Prof. Kees van Loon. First as a post-doctoral fellow, and between 1998 and 2004 as an assistant professor in molecular phytopathology at the department of Biology. In 2004 he was awarded a personal VICI fellowship from the Dutch science foundation for innovative research (1,5 M€), after which he was appointed as full professor Plant-Microbe Interactions. In 2010, he was awarded an ERC Advanced Investigator grant by the European Research Council (2,5 M€). His research group pioneered research on unravelling the rhizobacteria-induced systemic resistance signalling pathway and the role of phytohormone crosstalk in the regulation of plant immunity. In 2013 he was elected as a member of the Royal Netherlands Academy of Arts and Sciences (KNAW). Since 2014 he is a Thomson Reuters Highly Cited Researcher (World's top 1% in the field). Besides heading the Plant-Microbe Interactions group at the Department of Biology, Corné Pieterse is scientific director of the Institute of Environmental Biology of the Faculty of Science. He is also active in the Utrecht Graduate School of Life Sciences as member of the Executive Board of the Board of Studies. Since 2015, he is Distinguished Professor of the Faculty of Science at Utrecht University.