

# Prof. Christian Ulrichs

Faculty of Life Sciences

Albrecht Daniel Thaer-Institute of Agricultural and Horticultural Sciences

Department of Crop and Animal Sciences, Urban Ecophysiology of Plants

## Expertise

Prof. Ulrichs is an expert in the field of ecophysiology of plants with a special focus on plants in urban spaces. His team studies processes, which determine plant growth, e.g. stress exposure in an urban environment. The emphasis of his research lies on the analysis of the secondary metabolite balance (incl. its nutritional function), substance allocation, competition and plant-insect interaction. Prof. Ulrichs other major field of expertise is the quality assurance in food supply chains of horticultural products, especially for perishable foodstuffs like fruits and vegetables in temperate zones as well as in tropical/subtropical regions.

## Scientific Services

- molecular methods
- in-vitro propagation
- HPLC
- GC/MS
- electroantennogram studies
- trace gas analysis using photoacoustic spectroscopy

## Testimonials

- German specialty chemicals group: development of nanostructured plant protection agents
- H. Lorberg Baumschulerzeugnisse GmbH & Co. KG (tree nursery): selection of climate-tolerant boulevard trees (Alleebaum)
- Bein GmbH: development of electrostatic application processes of nanostructured elements
- Bayer Crop Science: biosensors to prove the existence of plant viruses
- XEROFLOR: development of vegetation carriers to prevent soil erosion in the Alps



## Topics / Trends

Biomolecules  
Health  
Climate / Climate Change  
Land Use  
Logistic Systems & Processes  
Sustainability & Ressource Efficiency  
Food  
Urbanisation & Mega Cities  
Consumer Protection  
Value Chains

## Industries

Agriculture & Food  
Energy, Utilities & Raw Materials  
Healthcare & Life Sciences

## Mentor for Startup

Botanicly GmbH

<https://de.linkedin.com/in/ulrichs>