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Agroscope
Plant-Production Systems (PSP)

Curriculum Vitae Dr. Judith Wirth

Agroscope

Department of Plant Production Systems
Research group: Herbology in Field Crops
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Personal information

Date of birth: December 6, 1975
Nationality: German

Education

2003-2006 **PhD in Molecular Plant Biology**
Institut National de la Recherche Agronomique (INRA),
Département de Biochimie et Physiologie Moléculaire des Plantes, Montpellier,
France
Thesis: Regulation of NO₃⁻ transporters at the mRNA and protein level in roots of
Arabidopsis thaliana

2000-2003 **Master of Crop Science**
Faculty of Agricultural Sciences, University of Hohenheim, Germany, 2000-2003
Major field of study: Specialization in Phytomedicine
Thesis: The contribution of AtAMT1;1 and AtAMT1;3 to the total NH₄⁺ uptake ca-
pacity in *Arabidopsis thaliana*

1997-2000 **Basic Study Period**
TU Munich, Freising-Weihenstephan, Germany, 1997-2000

Employment history

Since July 2010 **Agroscope, Switzerland**
Head of Research Group Herbology in Field Crops, since July 2010

Dec. 2008 – July 2010 **Agroscope, Switzerland**
Research associate in the research group weed control, December 2008 – June 2010

Mai 2007 – Nov 2008 **ETH Zürich, Switzerland**
Postdoc, Plant Biotechnology Group, Prof. W. Gruissem, Mai 2007 – November 2008

Research interests

Weed suppressive cover crops

The utilization of weed suppressive cover crops for weed management in arable crops, with a focus on crop-
weed root interactions

IWM (Integrated Weed Management)

Developing and implementing IWM strategies arable crop in Switzerland.

Herbicide resistance in weeds

Monitoring herbicide resistance in Switzerland.

Invasive alien species

Developing control strategies for invasive alien plants posing serious problems in agriculture, like *Cyperus es-
culentus* in Switzerland.

Publications in total (Scopus 5th July 2021)

ORCID ID:	https://orcid.org/0000-0003-2014-1153
Scopus ID:	7004992659
SCI papers	19
Number of citations	858
h-index	12

Institutional responsibilities

- Coordination of research activities in the area of weed science within Agroscope
- National expert for herbicide resistance in Switzerland
- National expert for efficacy in the herbicide evaluation process
- Member of the working group cover crops of the PAG (Plattform Ackerbau Grandes Cultures)
- Member of the working group yellow nutsedge of the PAG
- Member of the working group FEG (Fachexpertengruppe für Pflanzenschutzmittel) of the FOAG (Federal Office for Agriculture)
- Member of the working group vegetation control on railway tracks of the FOT (Federal Office of Transport)

Approved research projects

- Participation in the H2020 project IPMWorks (an EU-wide farm network demonstrating and promoting cost-effective IPM strategies)
- SNF project “Belowground crop-weed interaction” (205321L_189174)
- Ressourcenprojekt PestiRed, 2019-2026, Further development of integrated pest management: overall assessment of alternative plant protection methods in the context of a diverse rotation. On farm trials on 136 farms in four regions of Switzerland. Financed by the FOAG and the private sector.
- Two postdoc positions on cover crop weed suppression financed by Agroscope internal funds, 2014-2016 (24 months) and 2018-2019 (18 months)
- Beratungsprojekt Erdmandelgras, 2016-2020, Development of control strategies against yellow nutsedge (*Cyperus esculentus*) for agricultural practice. In close collaboration of researchers, advisers, agricultural organizations and concerned farmers. Financed by the FOAG.
- Alternatives to glyphosate treatments on railways
 - Since 2018, hot water treatments, financed by the Swiss railway SBB.
 - 2019, salt treatments, financed by the Swiss Südostbahn.

Memberships in scientific societies

Additional board member of the EWRS (European Weed Research Society)

Organization of conferences

- Organization of the EWRS workshop “Physical and Cultural Weed Control and Crop-Weed Interactions” in Nyon Switzerland, 2-5 April 2017
- Participation in the organization of the ESA (European Society for Agronomy) Congress in Geneva, 27th to 31st August 2018

Career breaks

April 2014 – Sept 2014	first maternity leave
Oct. 2016 – March 2017	second maternity leave
June 2020 – November 2020	third maternity leave