

IIRB SEMINAR 2021

**'Advancing weed control
in sugar beet with sensors
and field robotics'**

4th - 5th May 2021

Online seminar



INTERNATIONAL INSTITUTE
OF SUGAR BEET RESEARCH

PROGRAMME

Advancing weed control in sugar beet with sensors and field robotics

4th May 2021

Session 1: Overview/theoretical approaches

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| 2 pm | Welcome & introduction to the online seminar (Anne-Katrin Mahlein, IfZ) |
| 2.10 pm | Arno Ruckelshausen (University of Applied Sciences Osnabrück): Introduction to agricultural field robotics |
| 2.30 pm | Chris Mc Cool (University of Bonn): Robotic weeding: current and future developments |
| 2.45 pm | Merve Wollweber (Laser Zentrum Hannover): Laser applications for sustainable plant protection |
| 3.00 pm | Philipp Lottes (Pheno-Inspect): Vision-based plant classification systems for agricultural robots |
| 3.15 pm | Additional questions to talks
Introduction and teaser on company/
start-up solutions |
| 3.30 pm | Video access companies/start-ups
Contact option for participants,
speakers and exhibitors in chats
and 1:1 video meetings |
| 5 pm | End of day 1 |

5th May 2021

Session 2: Practical application/experiences

- 2 pm Welcome (Bo Secher, Nordic Sugar)
- 2.10 pm Peter Risser (Südzucker AG):
Practical experiences in weed control using chemical, mechanical and autonomous methods
- 2.25 pm Stefan Meldau (KWS SAAT SE):
Innovative robot systems to combat weeds in sugar beet: a reality check in the field
- 2.40 pm Olga Fishkis (IfZ): Is hoeing more environmentally friendly than band-spraying and broadcast herbicide application?
- 2.55 pm Additional questions to talks, break
- 3.15 pm Bo Secher (Nordic Sugar):
The potential for spot spraying and cross row harrowing with commercially available technologies
- 3.30 pm Simon Walther (Thünen Institute):
Economics of precision weed management in sugar beet
- 3.45 pm Otto Nielsen (NBR Nordic Beet Research): Market acceptance by European farmers of the use of sensors and robots for weed control – results of a survey
- 4.0 pm Summary and outlook
Teaser on company/start-up solutions
- 4.10 pm Video access companies/start-ups
Contact option for participants, speakers and exhibitors in chats and 1:1 video meetings
- 5 pm End of day 2

Venue

Converia Virtual Venue

Presentations will be published on the IIRB website (www.iirb.org) after the seminar.

Exhibitors

We are grateful to the following companies for their participation in the virtual exhibition and for their support of the seminar:

AGROINTELLI

 **ecorobotix**

FARMDRÖID

**FARMING
REVOLUTION** 

 **strube**
Die Saat. Seit 1877

 **xarvio™**
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The programme was established in cooperation with Farmerspace and Phenorob.

 **FARMERSPACE**
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 **PHENOROB**

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