IIRB SEMINAR 2023

The use of weather data in crop management

5th December 2023

Faculty Club, Groot Begijnhof 14, B – 3000 Leuven

INTERNATIONAL INSTITUTE OF SUGAR BEET RESEARCH
PROGRAMME

8.30 am Jan Willem VAN ROESSEL (President of IIRB) – Welcome

I. Meteorological data and weather prediction – possibilities and limitations

8.35 am Steve Dorling (WeatherQuest Ltd, UK): Insights for sugar beet production from weather and climate data

9.00 am Rafael Posada Navia-Osorio (DWD, D): Agrometeorology as a support for agriculture – experience of the German Weather Service

II. Weather data-based models in other crops: what is there to learn for sugar beet?

9.20 am Geert Kessel (WUR, NL): Weather based modelling of the P. infestans infection cycle to guide preventive fungicide applications

9.40 am Patrick Hann (MELES, A): Modelling approaches to predict the occurrence and flight activity of click-beetle species (Agriotes sp.) and wireworm damages on potatoes in Austria

10.00 am Claas Nendel (ZALF, D): Predicting crop growth and yields at larger scales – the current state of mechanistic modelling

10.20 am Coffee break

III. Weather data as a basis for Integrated Crop Management in sugar beet

Weather data as a basis for agronomic decisions

10.50 am Rémy Duval (ITB, F): Evaluating suitable days for field operations, including mechanical weeding: The tool JDistas

11.05 am Joakim Ekelöf, William English (NBR, S): The use of weather data for modeling at NBR

11.20 am Corné Kempenaar (WUR, NL): Use of weather data in agronomic decisions / ICM
Cercospora: an example of leaf disease forecast models

11.40 am  François Joudelat (ITB, F): Forecasting Cercospora incidence in real-time with weather data, plot features and assimilation of measurements

12.00 am  Simon Bowen (BBRO, UK): Cercospora: weather data, risk monitoring and disease management in the UK

12.20 pm  Abel Barreto (IfZ, D): Integrating environmental, meteorological and drone data to predict the occurrence of *Cercospora beticola* in sugar beet

12.40 pm  Lunch break

Weather data-based models to predict insect occurrence

2 pm  James Bell (Rothamsted Research, UK): Advancing pre-season and within-season rolling forecasts for the virus yellows aphid vector *Myzus persicae*

2.20 pm  Manuela Schieler (ZEPP, D): A decision support system to regulate *Pentastiridius leporinus*: a vector of phytopathogens in sugar beets

2.40 pm  Laura Bernadó (AIT, A): AI-supported models for predicting sugar beet weevil infestations

IV. Challenges posed by a changing climate

3 pm  Jan Willem van Roessel (IRS, NL): The influence of weather and climate on the growth of sugar beet (and other crops)

3.20 pm  Elma Raaijmakers (IRS, NL): Closing remarks

3.30 pm  End of seminar
Venue
Faculty Club
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