



**LEGUMINOSE**  
the way to a green transition

# **Modelling Intercropping Systems – From Analysis to Decision Making**

Summer school programme

Date: 6 – 9 July 2026

Venue: BOKU University Vienna, Gregor-Mendel-Straße 33, Seminar Room SR22



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**UK Research  
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## Programme

Monday, 6 July	
08:30 – 09:00	Arrival, coffee, and registration
09:00 – 09:15	Opening remarks by Prof. Siegrid Steinkellner, Head of Department of Agricultural Sciences, BOKU University
09:15 – 10:30	Intercropping systems – Benefits and challenges (Ahmad Manschadi)
10:30 – 11:00	Morning break
11:00 – 12:30	Modelling intercropping systems – Objectives and approaches (Ahmad Manschadi)
12:30 – 13:30	Lunch break
13:30 – 15:00	SSM-iCrop Model – Structure and configuration in Excel (Ahmad Manschadi)
15:00 – 15:30	Afternoon break
15:30 – 17:30	Hands-on exercise with sample simulation files (Ahmad Manschadi)

Tuesday, 7 July	
08:30 – 09:00	Recap of yesterday, Q&A, and goal setting
09:00 – 10:30	Guest lecture: “Better Understanding Species Interactions in Intercropping with the Support of Models” (Sabine Seidel, Prof. of Organic Farming, BOKU University, Vienna, Austria)
10:30 – 11:00	Morning break
11:00 – 12:30	SSM-iCrop – Modelling crop phenology and leaf area development (Ahmad Manschadi)
12:30 – 13:30	Lunch break
13:30 – 15:00	SSM-iCrop – Modelling crop growth and water/nitrogen demand (Ahmad Manschadi)
15:00 – 15:30	Afternoon break
15:30 – 17:30	Hands-on exercise with the LEGUMINOSE web-based Decision Support System for Intercropping (Ahmad Manschadi)



### Wednesday, 8 July

08:30 – 09:00	Recap of yesterday, Q&A, and goal setting
09:00 – 10:30	Guest Lecture: “Intercropping Systems: Agronomic and Environmental Benefits, Practical Considerations, and Evaluation Metrics” (Tom Sizmur, Prof. of Environmental Chemistry, University of Reading, UK)
10:30 – 11:00	Morning break
11:00 – 12:30	SSM-iCrop – Modelling soil water and nitrogen dynamics (Ahmad Manschadi)
12:30 – 13:30	Lunch break
13:30 – 15:00	InterCrop Model – Modelling competition for light, water, and nitrogen (Ahmad Manschadi)
15:00 – 15:30	Afternoon break
15:30 – 17:30	InterCrop Model – Configuration, execution, and analysis (Ahmad Manschadi)

### Thursday, 9 July

08:30 – 09:00	Recap of yesterday, Q&A, and goal setting
09:00 – 10:30	Data requirements for crop modelling (Ahmad Manschadi)
10:30 – 11:00	Morning break
11:00 – 12:30	InterCrop Model – Hands-on simulation exercises (Ahmad Manschadi)
12:30 – 13:30	Lunch break
13:30 – 15:00	InterCrop Model – Hands-on simulation exercises (Ahmad Manschadi)
15:00 – 15:30	Afternoon break
15:30 – 17:30	Hands-on intercropping simulation scenarios with LEGUMINOSE (Ahmad Manschadi)
18:00 – 21:00	Social dinner