

2024-09-23

# Plant-microbe interactions Växt-mikrobinteraktioner

BI1354

## COURSE SCHEDULE 2024/2025

All lectures are taking place via videoconferencing at Framtiden (Mark-Vatten-Miljöcentrum/MVM building), Sal H (Undervisningshuset, U-hus) or Lennart Kennes Sal (BioCenter) teaching rooms while all other exercises/events are in the indicated rooms in the BioCenter. The computer lab takes place at the Computer room 1 (U-hus). The written exam will be held in Tentamenssal 1 (U-hus). Compulsory parts are marked\*.

### Week 45

- Mon 4/11 9.15-11.00 **Course introduction\*** (Daniel Hofius) (Framtiden, MVM)
- Tue 5/11 9.15-10.00 **L1:** Significance of plant diseases and disease resistance (Kristiina Mäkinen) (Framtiden, MVM)  
10.15-11.00 **L2:** Defence mechanisms of plants (Daniel Hofius) (Framtiden, MVM)
- Wed 6/11 9.15-11.00 **L3:** Infection by viruses (Anders Hafrén) (Framtiden, MVM)
- Thu 7/11 9.15-11.00 **L4:** Infection by bacteria (Minna Pirhonen) (Framtiden, MVM)
- Fri 8/11 9.15-11.00 **L5:** Bacterial virulence factors and secretion systems (Minna Pirhonen) (Framtiden, MVM)  
11.15-12.00 **Literature project work:** Introduction\* (BioC Room A-402)

### Week 46

- Mon 11/11 9.15-11.00 **Discussion of study questions** (BioC Room A-338)
- Tue 12/11 9.15-11.00 **L6:** Infection by biotrophic fungi and oomycetes (Eeva Martinen) (Framtiden, MVM)
- Wed 13/11 9.15-11.00 **L7:** Fungal and oomycete effectors (Christina Dixelius) (Framtiden, MVM)
- Thu 14/11 9.15-11.00 **L8:** Infection by necrotrophic fungi (Åke Olson) (Sal H, U-hus)
- Fri 15/11 9.15-11.00 **L9:** Nematode-plant interactions (Maria Viketoft) (Framtiden, MVM)

### Week 47

- Mon 18/11 9.15-11.00 **Discussion of study questions** (BioC Room A-502)  
13.15-15.00 **Lab I:** Introduction of projects in research groups\* (BioC Room A-502)
- Tue 19/11 9.15-11.00 **L10:** Tripartite host-pathogen-vector interactions (Maija Pollari) (Framtiden, MVM)

Wed 20/11	9.15-11.00	<b>L11:</b> Plant disease dynamics in natural populations (Hanna Susi) (Sal H, U-hus)
Thu 21/11	9.15-11.00	<b>L12:</b> Signalling in plant defence I, Plant hormones (Kirk Overmyer) (Framtiden, MVM)
Fri 22/11	9.15-11.00	<b>L13:</b> Signalling in plant defence II, PCD (Daniel Hofius) (Sal H, U-hus)
<b>Week 47</b>		
Mon 25/11	9.15-11.00	<b>Discussion of study questions</b> (BioC Room A-502)
Tue 26/11	9.15-11.00	<b>L14:</b> Abiotic stress responses (Saijaliisa Kangasjärvi) (Sal H, U-hus)
Wed 27/11	9.15-11.00	<b>L15:</b> Defence to viruses by gene silencing and gene-for-gene interaction (Anders Hafren) (Sal H, U-hus)
Thu 28/11	9.15-11.00	<b>L16:</b> Transgenic resistance to pathogens (Anders Kvarnheden) (Sal H, U-hus)
Fri 29/11	9.15-11.00	<b>L17:</b> Fungal symbiosis and parasitism; nutrients and ectomycorrhiza (Judith Lundberg-Felten) (Sal H, U-hus)
<b>Week 48</b>		
Mon 2/12	9.15-11.00	<b>Discussion of study questions</b> (BioC Room A-502)
Tue 3/12	9.15-11.00	<b>L18:</b> Molecular regulation of mycorrhizal interactions (Judith Lundberg-Felten) (Lennart Kennes sal, BioCenter)
Wed 4/12	9.15-11.00	<b>L19:</b> Symbiotic interactions with bacteria (Per-Olof Lundquist) (Framtiden, MVM)
Thu 5/12	9.15-11.00	<b>L20:</b> Biological control of plant diseases (Derek Lundberg) (Framtiden, MVM)
Fri 6/12	No teaching	<b>Literature project work:</b> Report handed in*
<b>Week 49</b>		
Mon 9/12	9.15-11.00	<b>Discussion of study questions</b> (BioC Room A-372)
	13.15-16.00	<b>Lab I:</b> Practical part in research groups*
Tue 10/12- Fri 13/12	9.15-16.00	<b>Lab I:</b> Practical part in research groups*
<b>Week 50</b>		
Mon 16/12- Fri 20/12	9.15-16.00	<b>Lab I:</b> Practical part in research groups*

## Christmas and New Year holidays

### Week 1 (2025)

Thu 02/01-

Fri 03/01 No teaching **Lab I:** Research project report handed in\*

### Week 2 (2025)

Mon 06/01 Epiphany holiday

Tue 07/01 09.15-11.00 **Questions before the examination** (BioC Room A-402)

Wed 08/01 8:00-11.00 **Written exam** (Tentamenssal 1, U-hus)

Thu 09/01 No teaching

Fri 10/01 9.15-16.00 **Lab II:** DNA sequence analysis\* (Datorsal 1, Ulls hus, A-block)  
(Anders Kvarnheden)

### Week 3 (2025)

Mon 13/01 No teaching

Tue 14/01 No teaching

Wed 15/01 8:15-12.00 **Presentation of literature projects** (BioC Room A-402)

Thu 16/01 No teaching

Fri 17/01 09.15-11.00 **Lab I: Presentation of research projects** (BioC Room A-402)  
11.15-12.00 **Course evaluation**