

# Bacteria-beetle interaction in Acute Oak Decline: chemical cues as potential triggers of *Brenneria goodwinii* pathogenicity

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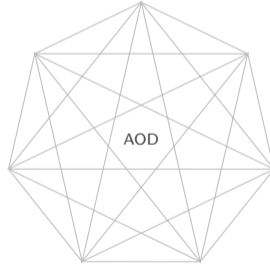


Department  
for Environment  
Food & Rural Affairs

# The Acute Oak Decline pathosystem



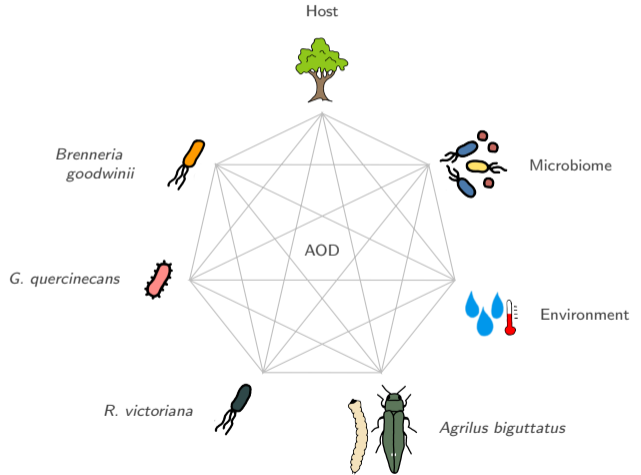
- Stem bleeds
- Inner bark necrosis



# The Acute Oak Decline pathosystem



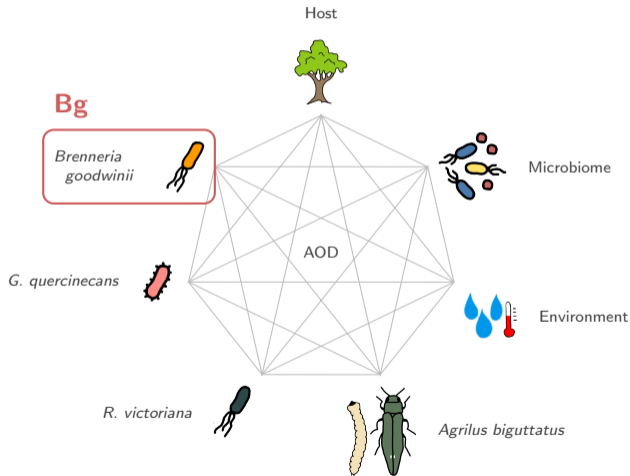
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# The Acute Oak Decline pathosystem



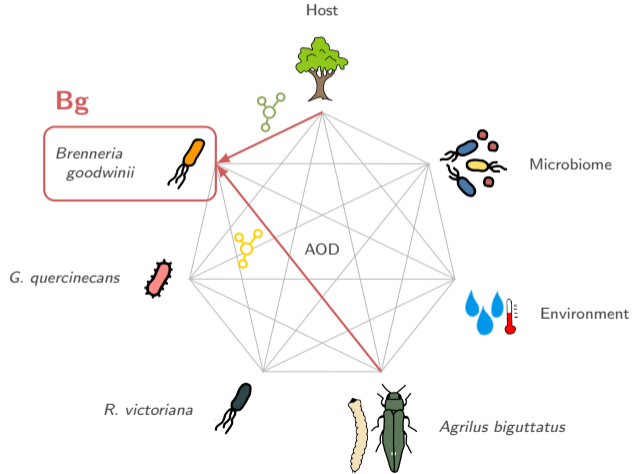
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# The Acute Oak Decline pathosystem

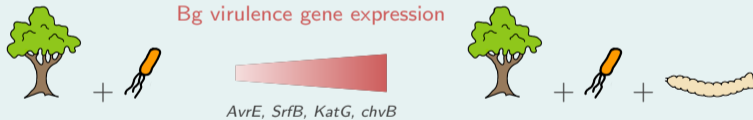


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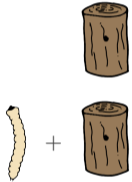
# The Bg-beetle interaction

- ▶ Bg can form tissue lesion when infecting the host
- ▶ The pathogenicity of Bg is increased in the presence of beetle larvae



# Can we identify the chemical signals triggering Bg pathogenicity?

Oak log trials



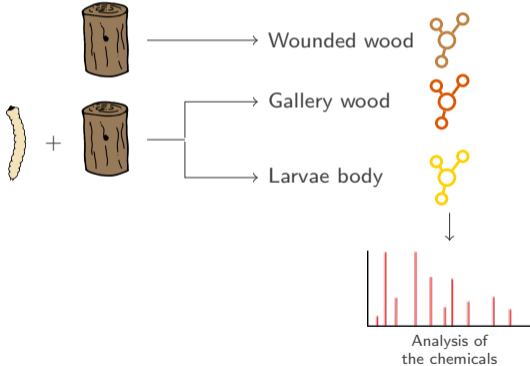
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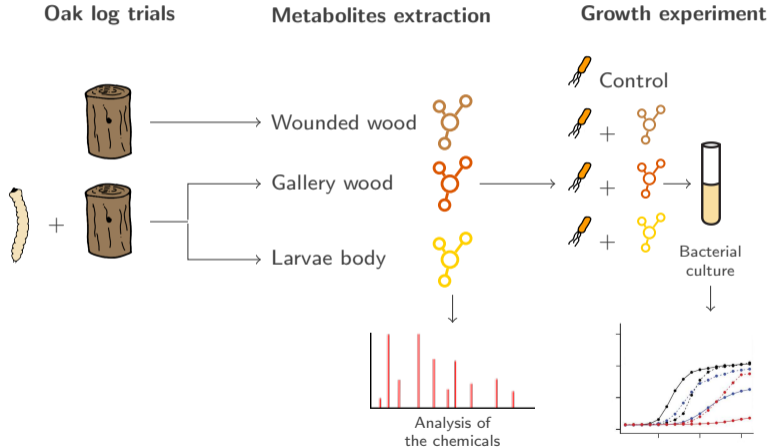
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Oak log trials

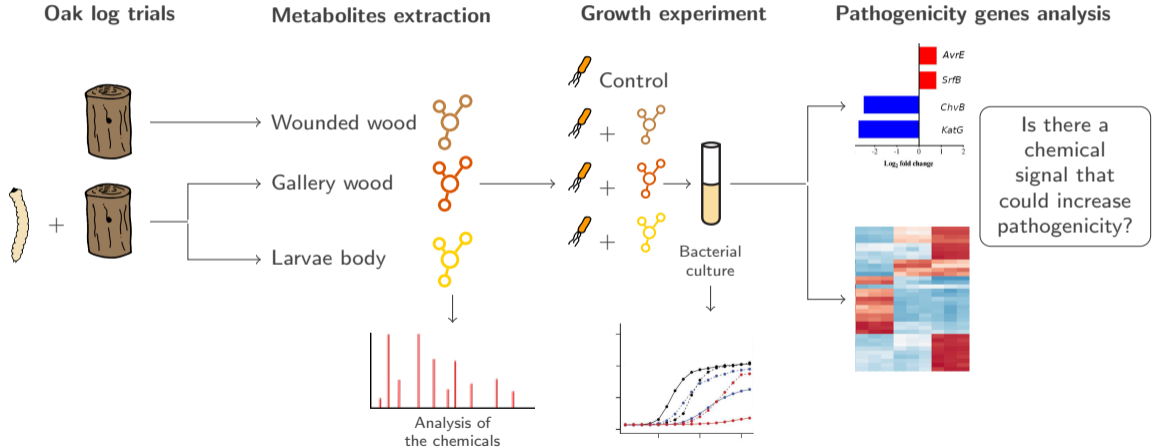
Metabolites extraction



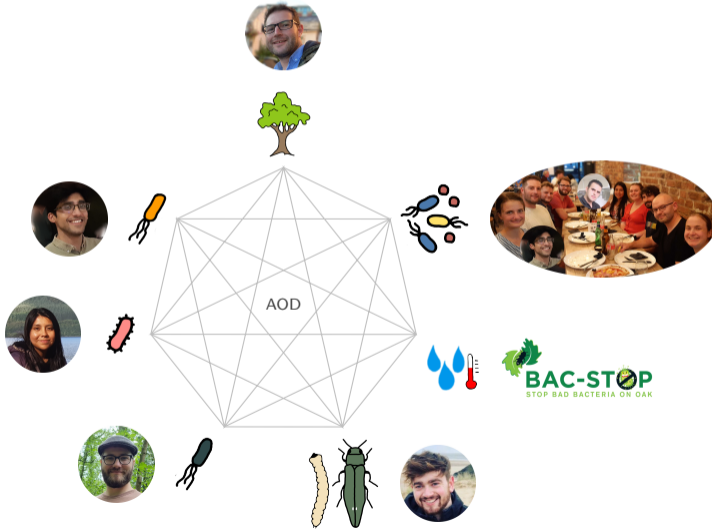
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# Many thanks to the BAC-STOP team and the MEG team!



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