



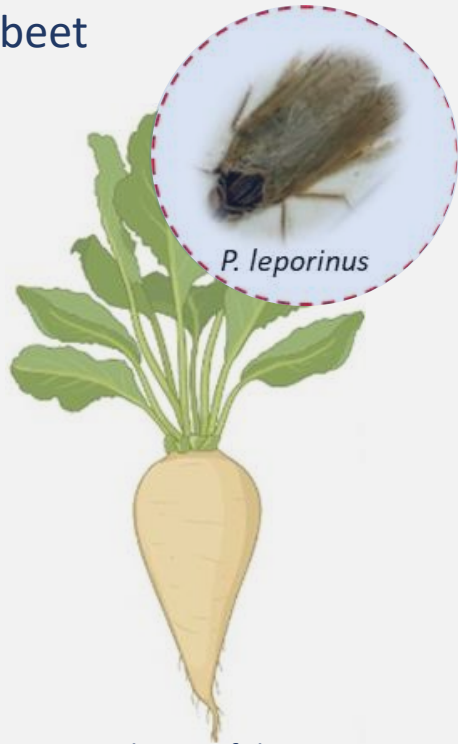
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Syndrome “basses richesses” disease induced sectorial distribution of photoassimilates in sugar beet revealed by combined MRI-PET

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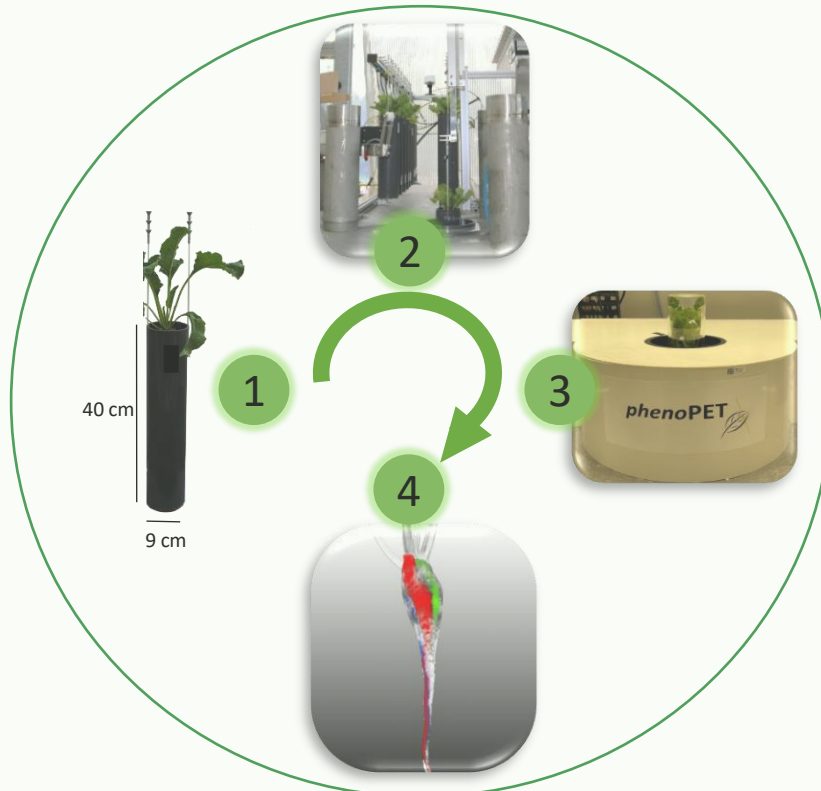
Objectives: 1. Quantify SBR effects on structural development of belowground sugar beet
2. Determine how SBR affect carbon (C) allocation within sugar beet

SBR: Phloem restricted disease affecting sugar beet



Inoculation of the SBR proteobacterium vector, *Pentastiridius leporinus* on healthy beet plants

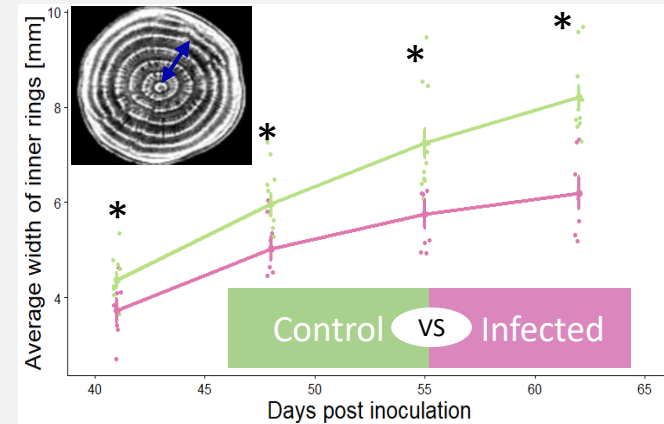
Belowground Phenotyping



Structural and functional root imaging (1) customized pots, 3) root structural acquisition with MRI, 2) tracing C allocation with PET, 4) MRI-PET co-registration

SBR effects on structural beet growth and C allocation

SBR reduced MRI internal beet ring after 42 dpi:



SBR induced a sectorial distribution of recently fixed C in sugar beet:

