Are earthworms antagonists for *Sclerotinia sclerotiorum*?

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Sclerotinia

• Soil borne fungi

• more than 400 hosts

• 3-10 years infectious
Sclerotinia

- Sclerotial survival structure
Sclerotinia

• Way of infection
  ○ Mycelium trough roots
Sclerotinia

• Way of infection
  o Mycelium trough roots
  o Spores by apothecia
Earthworms

• *Lumbricus terrestris*
  o Common earthworm, dew worm, nightcrawler
  o Fungi, plant material, bacteria …
Earthworms

- Anegic
  - foraging aboveground during the nighttime
- Burrows and middens
• Buckwheat (*Fagopyrum esculentum*)
• Phacelia (*Phacelia tanacetifolia*)

• Accessible 5x10mm

• Non-accessible 1x1mm
• Toothpick scheme
• Toothpick scheme
Outcomes

- Less sclerotia stipes in acc. mesh tubes (p<0.05)
Conclusion

- Polysaccharides inhibits germination by their antifungal function
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- The increased surface activity indicates searching habits and the attempt to forage sclerotia
Contact

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References