

Soil Health and Slugs in the Willamette Valley

Slug management and control is a significant barrier to the long-term adoption of reduced soil disturbance practices in the Willamette Valley. Reducing soil disturbance is a key component of the NRCS's effort to increase soil health across Oregon.

Slug Control:

- Conventional tillage- crushes slugs, eggs, and slug tunnels
- Baits/Sprays- Iron compounds or Metaldehyde applied commonly in fall after the first rains, at planting, post emergence, and sometimes in spring.

Challenges:

- Slug populations and species to control are growing
- Control is a continuous effort
- Slug pressure can vary field to field and season to season with little predictability
- No new control measures are currently being explored or refined at a research level -including biological options

Current Efforts:

- ARS/OSU Extension looking at geospatial relationship between field characteristics and slug "hot spots"
- NRCS convened a listening group in May of 2014 with experienced no-till producers, conservation districts, OSU researchers, and NRCS staff.

Next Steps:

- Who is interested in thinking more about slugs!?!
- NRCS wants to build partnerships with groups interested in slugs to develop awareness and practical actions so we can better understand control in reduced soil disturbance systems.



Photos: Liphatech

Principles of Soil Health

- 1) Keep soil covered
- 2) Minimize disturbance
- 3) Keep a living root
- 4) Diversity above for diversity below

Crops Impacted by Slugs

- 1) Tall Fescue
- 2) Perennial Ryegrass
- 3) Annual Ryegrass
- 4) Bentgrass
- 5) Orchardgrass
- 6) Red Clover
- 7) Crimson Clover
- 8) White Clover
- 9) Arrowleaf Clover
- 10) Radish for seed
- 11) Turnip for seed
- 12) Christmas trees (export)
- 13) Vetch for seed
- 14) Most vegetable crops
- 15) Wheat
- 16) Oats
- 17) Barley

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