

(Photo credit: UC IPM website)

## Symphylans IPM Strategies

The following options can be combined for Integrated Pest Management (IPM) of symphylans. You do not need to do everything on this list—instead, this is a "toolbox" approach where you can select the strategies that make sense for your context and tailor them to your specific goals.

- Prevention: ensure any compost you buy is symphylans-free
- **Crop selection**: planting tolerant crops (e.g., small grains, beans) in problem areas
- Monitoring: potato bait test to monitor population levels & locations
- **Record keeping**: use maps, sketches, notes, etc. to track populations & damage over time
- **Strategic tillage**: disrupts the pathways that symphylans use to move around; bear in mind heavy repeated tillage over time can reduce soil organic matter & structure
- Mild/moderate compaction: reduces pathways for symphylan movement
- **Potato rotation**: some farmers find that planting a new crop immediately after potato harvest can lead to lower symphylans damage
- Limiting undecomposed residues and moderating organic matter inputs: reduces food sources for symphylans
- Remove any unharvested root crops: reduces food sources for symphylans
- **Transplants**: can help give plants a head start
- **Overplanting**: can help compensate for anticipated losses
- Sanitizing farm equipment: helps reduce spread of symphylans in the field
- **Promoting natural predators**: such as centipedes & ground beetles
- **Insecticides & oil-based products:** there are many options including azadiractinbased products, pyrethrin-based products, and oil-based products such as clove oil and thyme oil (these serve as examples, not endorsements)

For more details, please see my 30-minute YouTube recording on Symphylan IPM (UCCE North Bay Specialty Crops), the UC IPM website, and the ATTRA article, "Symphylans: Soil Pest Management Options" by Jon Umbel, Jim Leap, and other co-authors.

Written by Ellie Andrews, UCCE Specialty Crops Advisor for Sonoma, Marin, and Napa counties, May 2024.

