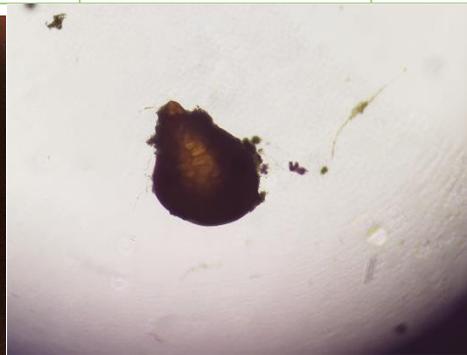


NEMATODE BREAKDOWN AMONG POTATO, CORN, SOYBEAN & SUGARBEET.

Crop	Common Plant Parasitic Nematodes	Typical Crop Rotation	Fumigants and Nematicides.
Potato	Lesion (<i>Pratylenchus</i>), Cyst (<i>Heterodera/Globodera</i>), Root knot (<i>Meloidogyne</i>), Stubby root (<i>Paratrichodorus/Trichodorus</i>), AWL (<i>Dolichodorus</i>), Lance (<i>Hoplolaimus</i>), and Stem and Bulb (<i>Ditylenchus</i>).	4-year rotation with Alfalfa, Soybean and Corn.	Vapam- Fumigant Vydate- Nematicide Mocap- Nematicide
Corn	Root knot (<i>Meloidogyne</i>), Lesion (<i>Pratylenchus</i>), Dagger (<i>Xiphinema</i>), Stubby root (<i>Paratrichodorus/Trichodorus</i>), Cyst (<i>Heterodera/Globodera</i>), AWL (<i>Dolichodorus</i>), Lance (<i>Hoplolaimus</i>), Reniform (<i>Rotylenchus</i>), Spiral (<i>Helicotylenchus</i>) and Sting (<i>Belonolaimus</i>).	Wheat, Soybean, Sugar beet & Alfalfa	Seed Treatments and Variety (different for every seed company)
Soybean	Cyst (<i>Heterodera/Globodera</i>), Stubby root (<i>Paratrichodorus/Trichodorus</i>), Root knot (<i>Meloidogyne</i>), Reniform (<i>Rotylenchus</i>), Spiral (<i>Helicotylenchus</i>) Lesion (<i>Pratylenchus</i>), Sting (<i>Belonolaimus</i>), Stunt (<i>Tylenchorhynchus</i>).	Wheat, Corn, Sugar beet & Alfalfa	Seed Treatments and Variety (different for every seed company)
Sugarbeet	Stem and Bulb (<i>Ditylenchus</i>), Stubby root (<i>Paratrichodorus/Trichodorus</i>), Root knot (<i>Meloidogyne</i>) and Cyst (<i>Heterodera/Globodera</i>).	Wheat, Corn, Soybean & Alfalfa	Seed Treatments and Variety (different for every seed company)



Lesion nematode Photo by Cody Williams



Root knot nematode Photo by Cody Williams

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ADDITIONAL INFORMATION

-Cyst Nematode: The cyst nematode, Specifically the soybean cyst nematode, can survive in the soil for up to 8 years no matter the temperature. Even with harsh winters they seem to stay dormant in soil 100% of the time. They live in peak temperatures around 10-26.5C(50-79.7F). Around 75 degrees F (23.8 C) is the perfect temperature for the cyst to start its life cycle. They have a 4-week life cycle at the temperature of 75 F, which allows for many generations to grow in a summer/growing season.

-Seed Treatment and Variety: For Corn, Soybean and Sugar beet the specific nematicide or fumigant may be a seed treatment or variety-based product. These all depend on what the seed companies have that growing season.

-Crop Rotation: Rotation is a large factor in deterring Plant parasitic nematodes. As the table shows above, Potatoes: stick to a 4-year rotation with Alfalfa, soybean or corn depending on your needs/pest issues. *Row crops*: As shown above Corn, Soybean and Sugar beet are row crops and can usually be included in a rotation with wheat or alfalfa to help fight nematode population growth.

-Other factors that effect nematode Populations: There are many factors that effect your nematode numbers in a field, some of those include Soil health and transfers. Soil health is a slow process that you work on over time and following the correct practices for your type of soil is key to preventing Plant-parasitic nematodes. Soil on truck, tractor, equipment tires or even boots can transfer nematodes from field to field. It is a good practice to watch the transfer soils as well to prevent cross contamination between fields. Storage crops can hold on to sedentary nematodes, like Root knot and Cyst, during the winter months as well. (ex. Potato/sugar beet)