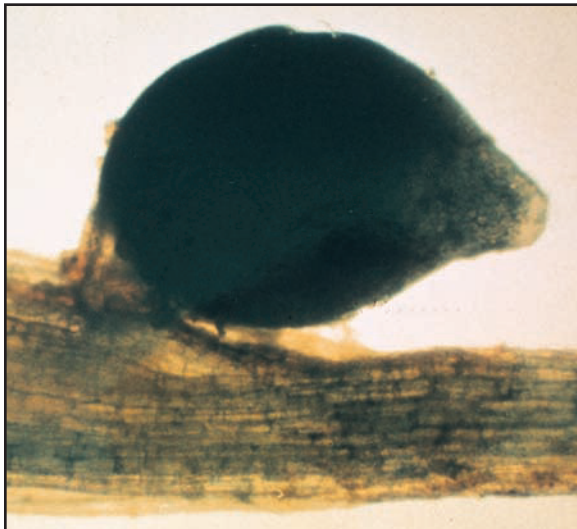


CYST NEMATODE

Heterodera schachtii



Identification

- The most widespread and most yield-limiting factor in sugarbeet production
- Cyst nematode eggs can lie dormant in fields for years
- Once their cycle of growth begins, nematodes continue to produce several generations that feed from the host vegetation
- Nematode males and females have different shapes
- Females are lemon shaped, white and show up on hair roots
- Their body slowly turns from white to brown
- The female cyst often contains more than 250 eggs
- The hatching of the larvae and the movement out of the cysts, is caused by favorable ground temperatures 50°+ F, moisture and soil aeration

Cause of Infestation

- A hatching factor from the secretion of the host plant, stimulates and attracts the larvae to the host plant (Sugarbeets and some weed species are host plants)



- The larvae penetrates the root tissue and causes the cell walls to dissolve
- The beet's ability to absorb moisture and nutrients is hindered

Detection

- Underdeveloped patches in the field
- Sunlight causes the leaves to wilt
- Infected plants remain smaller and lighter in color, and show nutrient deficiency
- A bearded sugarbeet root is often described in the field

Control

- No resistant beet varieties yet available
- Nematocide or fumigants
- Avoid spread by not returning tare soil to the field
- Longer sugarbeet rotations can be helpful in combination of controlling other host species including many weeds
- Trap cropping with an oil radish or mustard has greatly reduced the populations of cyst nematodes

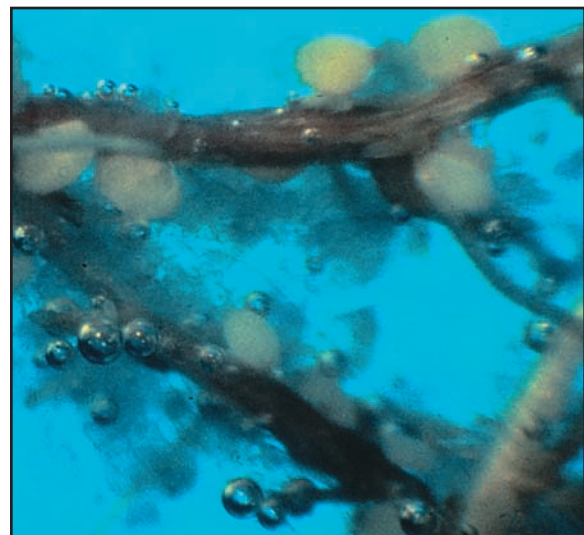


photo by: A. E. Steele