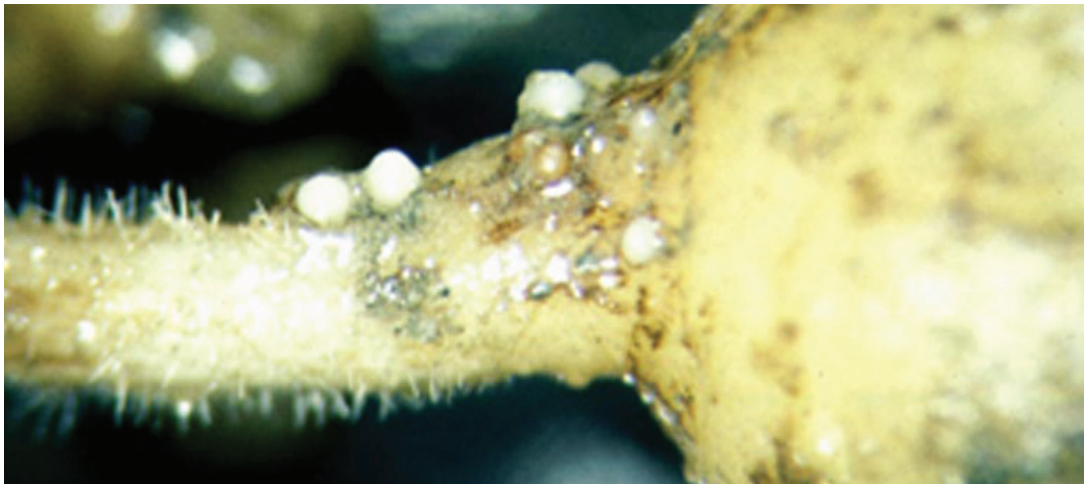
INVASIVE INVERTEBRATES THREATENING ILLINOIS HABITATS
Golden Nematode *(Globodera rostochiensis)*



Close up photos of cysts. Color develops from a golden yellow to brown.

ORIGIN: Unknown.

CURRENT DISTRIBUTION: Not currently found in Illinois. First discovered in New York in 1941 where it is restricted to about 2000 acres as of 2002. They are widespread throughout Europe and estimated to be in 75% of the total Potato producing land areas.

IDENTIFICATION: Nematodes are not visible without the aid of a microscope and cannot be identified without proper diagnostics. Egg casing with up to 500 eggs are born in protective cysts attached to plant roots about the size of a pinhead. They begin as a yellow-golden color and fade into brown. Without a sufficient host plant the egg cysts may go dormant for up to 30 years. Infected plants may have stunted and poor growth for several years. As their numbers increase over years they will spread throughout agricultural fields further decreasing plant growth. Plants may also develop poor root growth and may become easily wilted and will eventually die.

HABITAT: It is spread by the transportation of infested soils on equipment, movement of infected plant material including tuber, bulb, and nursery stock.

Host (Range): Primary hosts are plants in the Nightshade family (Solanaceae) including potatoes, tomatoes, eggplants, and several weeds.

IMPORTANCE: The Golden Nematode has become a serious problem in Europe and has become very costly and difficult to manage. Infested areas have a significant decline in production and as their populations grow may completely inhibit any production of potato crops.

MANAGEMENT: The preferred method to deal with the Golden Nematode is to grow resistant varieties. **Chemical treatments have too many negative facets. Other practices such as intercropping and crop rotations are useful.**

ILLINOIS COOPERATIVE AGRICULTURAL PEST SURVEY

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