



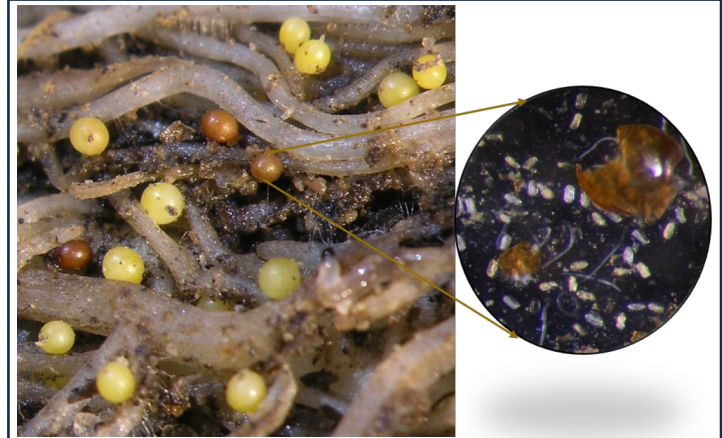
# POTATOES & PESTS PAPAS

USDA NIFA 2022-51181-38450

Actionable Science Against Nematodes

## Golden nematode: a devastating potato pest

- The golden nematode (GN; *Globodera rostochiensis*) is about half a millimeter long, but it poses a very serious threat to the multi-billion-dollar US potato industry.
- GN forms cysts that can survive in the soil for over 30 years and can cause over 80% crop loss if left uncontrolled.
- Once GN is introduced, eradication is difficult and unrealistic, so these sites are kept under quarantine.
- If GN spreads to new sites, trade embargoes could result, hampering domestic and international trade.
- Quarantines affect the potato industry, but also any agricultural commodity shipped from the quarantined areas that carries soil, such as nursery, turf, root and tuber crops.



Golden and brown-colored GN cysts on potato roots (left image). Over 200 potato-hungry nematodes live within every cyst! (right image)

## Wild potato species offer novel resistance to potato cyst nematodes (PCN)



😊 Our large-scale screening has identified wild potato clones with robust and broad-spectrum resistance to PCN

😊 These new resistant germplasm are being utilized to breed for durable PCN resistance in US potato cultivars

FOR MORE INFORMATION, PLEASE VISIT [POTATONEMATODES.COM](http://POTATONEMATODES.COM)

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