



## POTATOES & PESTS

# PAPAS

Actionable Science Against Nematodes



## Root Lesion Nematodes (RLN)

Root lesion nematodes are microscopic vermiform or round shaped worms. RLN are migratory endoparasitic nematodes that destructively feed on plant cells, causing massive root tissue necrosis and are linked to the spread of pathogens.

Potatoes are under threat from root lesion nematodes, which can significantly damage the root system of the plant. This results in a reduced ability to absorb water and nutrients, leading to stunted growth and even death in severe cases. Moreover, the weakened root system can make the plant more vulnerable to other diseases and pests, exacerbating the problem. Although conventional management methods such as fumigation have been proven highly effective, they can cause harm to the soil microbiome's overall health. As a result, both growers and researchers have been exploring alternative and sustainable management programs that involve the use of composted amendments and green manures.

While the mechanism is unknown, Potato Early Die (PED) disease complex has been known to be caused by the RLN species *Pratylenchus penetrans* ability to form a synergistic relationship with the fungal plant pathogen *Verticillium dahliae* in potato cropping systems across North America. PED disease causes significant yield losses and reduced quality of potato crops. The disease affects the plant's root system, which can result in stunted growth, premature plant death, and reduced tuber size. This can have a major impact on potato growers' profitability and the availability of potatoes in the market. It is therefore important for growers to take preventive measures to manage their fields for plant parasitic nematodes and Potato Early Die disease.

#3 RANKED FOR GREATEST ECONOMIC IMPACT >350 HOST PLANTS

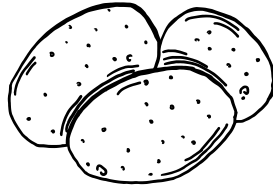


## Prevention

### IS THE BEST MANAGEMENT

- Find diagnostic support and test soil samples from fields regularly
- Sanitize equipment to prevent the spread of soil infestations
- Plant only clean, certified seed
- Little resistance in commercial varieties

**RLN IS AN INDUSTRY WIDE PROBLEM**



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

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