# Rent out land for potatoes? You could be infested!



#### What is PCN?

Potato cyst nematodes (PCN) are **soil borne pests** that feed and breed on potato roots. They produce cysts that can **survive in soil for many years** between potato crops meaning land can stay infested for a long time. Susceptible potato crops are **not viable** on badly infected land. They die early resulting in yield losses up to 80% and every susceptible potato crop **increases the infestation**.

# How does PCN affect landowners?

- Loss of rent if PCN causes yields to decrease, it may not be viable for growers to rent your land for potato production especially if granular nematicides are banned.
- Seed potatoes cannot legally be grown in land found to have PCN which could also lead to a loss of rental income.
- PCN spreads through soil movement so if soil is attached to machinery, wheels or boots moving between fields there is a high chance PCN will be spreading.



#### What should I do to my land?

Find out if you have a PCN problem. If you rent out land for ware potatoes, you may have PCN. Soil testing is the only way to determine if land is infested or clean.

If your land is clean - PROTECT IT.

If your land is infested - MANAGE IT.

#### Links to further information

PCN Hub - Home Page | Potato Cyst Nematode Hub (pcnhub.ac.uk)

SASA - Potato Cyst Nematodes (PCN) | SASA (Science & Advice for Scottish Agriculture)

## Protecting your land

- Only use certified seed potatoes they are less likely to introduce PCN because they are grown in fields which are found to be free from PCN prior to planting.
- Maintain a long rotation between potato crops (at least 6 years).
- Assess all operations to ensure the risk of introducing or spreading PCN is minimised. This includes any material brought onto farm to be applied on fields. PCN can spread in some composts, manures, and other waste products.

## Managing an Infestation

- Extend the length of time between potato crops.
- Talk to your tenants:
  - Do they know the PCN status of the land?
  - What are they planning to do to manage the problem?
- Implement an IPM plan to reduce the number of cysts present in contaminated land. Practices which increase the number of cysts in soil, increase the risk of spread to other fields. Nematicides do not prevent the spread or multiplication of PCN.
- Follow the hygiene requirements suggested below and communicate the importance of maintaining them to all staff, tenants, and contractors.
- Control ground keepers (volunteer potato plants) this is essential because they act as a host for PCN between potato crops. Recent work has shown that where groundkeepers are present, there is three times the amount of PCN found in fields.

# **Hygiene Requirements**

- Remove soil from machinery, wheels, and boots between fields especially when leaving a field with a known PCN infestation.
- Ensure that you, your contractors, or your tenants use clean machinery to avoid moving PCN between fields.
- Minimise soil and water run-off from rainfall or irrigation because this can move cysts between fields.
- Ensure potato boxes are free from soil when returned to the farm.
- Dispose of waste or excess soil responsibly to prevent the spread of PCN.
- Use a brush to remove soil from footwear or use different shoes in PCN infested and in clear land.
- Avoid animal movement between land which has PCN and land which is free from PCN e.g., horses where soil can accumulate in hooves.
- Do not transplant plants or move soil from infested areas to clean areas.















