



inov3PT
SEED POTATO
FOR THE FUTURE

NEM-EMERGE

An integrated set of novel approaches to counter the emergence and proliferation of invasive and virulent soil-borne nematodes

NEM-EMERGE

AN INTEGRATED SET OF NOVEL APPROACHES TO COUNTER THE EMERGENCE AND PROLIFERATION OF INVASIVE AND VIRULENT SOIL-BORNE NEMATODES

Abstract

Soil-transmitted plant-parasitic nematodes represent a biosecurity risk for global food production, with an estimated annual loss of €110 billion worldwide. Recent reports document the emergence of new root-knot nematode (RKN) and cyst nematode (PCN) problems in tomato and potato crops across Europe and beyond, due to two independent factors: global warming and genetic selection. The European NEM-EMERGE project aims to provide a range of sustainable solutions for the conventional and organic farming sectors, based on the principles of integrated pest management. In addition, monitoring and risk assessment tools will be developed to help plant health authorities make decisions and develop appropriate policies.

Actions

- Action 1 :** Global warming: limiting the spread of native and emerging root-knot nematodes
- Action 2 :** Global warming: counteracting the inactivation of hot plant resistance by high soil temperatures
- Action 3 :** Genetic selection: counteracting the development of virulence in asexually reproducing root-knot nematodes (Meloidogyne)
- Action 4 :** Genetic selection: managing potato cyst nematodes that have overcome current host plant resistance
- Action 5 :** Control of nematodes based on suppressive native soils (biocontrol strategies)
- Action 6 :** Adoption, dissemination and exploitation of the project, including communication activities
- Action 7 :** Project coordination and management, including training

TECHNICAL MEMO

Call for projects:
HORIZON-CL6-2022-FARM2FORK-02-two-stage, HORIZON-RIA

Project leader:



Project duration: 48 months

Start/End of project:
01/01/2024 – 31/12/2027

Partners:

- Hilbrands Laboratorium B.V
- Kmetijski Institut Slovenije
- The James Hutton Institute
- Julius Kuhn-Institut Bundeforschungsinstitut für Kulturpflanzen
- Universitat Politècnica De Catalunya
- Ondokuz Mayıs Üniversitesi
- Enza Zaden Research and Development
- INRAE
- Stichting Wageningen Research
- inov3PT
- Universidad De Castilla – La Mancha
- The University of Exeter
- International Institute of Tropical Agriculture
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Project website:



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