

TECHNOLOGYPROFILE

Nemia™

Nemia centres on *Purpureocillium lilacinum* PL11 and root-knot nematode management in protected vegetables. Meloidogyne nematodes affect the root environment, where gall formation can disrupt root function and crop establishment. The PL11 fungal pathway complements the wider management of root health, soil condition and continuous vegetable production.

1 Product identification

Field	Detail
Product name	Nemia™
Category	Biological crop protection
Principal components	<i>Purpureocillium lilacinum</i> PL11
Target crops	Tomato · Pepper · Cucumber
Agricultural purpose	Root-knot nematode pressure

2 Product role and biological basis

A defined root-knot target

PL11 has a specific biological role against Meloidogyne root-knot nematodes. Identifying the nematode group connects the root problem with a targeted biological approach.

Biological protection around roots

A nematode-focused fungal pathway addresses pest pressure in the root environment. Root condition, crop establishment and the history of nematode infestation provide the agronomic context.

Protected vegetable systems

Tomato, pepper and cucumber are the principal crop settings. Their production environment and recurring root-health challenges give biological nematode management a defined place in crop planning.

3 Composition and material characteristics

Purpureocillium lilacinum PL11

PL11 identifies a specific strain of the fungus *Purpureocillium lilacinum*. Its nematode-management role concerns Meloidogyne root-knot nematodes, linking the biological identity with a defined root-health target.

Wettable powder

PL11 is documented in wettable-powder formulations. In this formulation family, the biological component and the physical powder characteristics together determine the technical description; organism identity, biological activity and formulation quality are complementary attributes.

4 Biological targets and application evidence

1. France • protected vegetable uses • PL11 regulatory record

ANSES lists root-knot nematode evidence within the tomato-aubergine, pepper and cucurbit uses. The stated biological target is *Meloidogyne* sp.

Agricultural relevance

Connects PL11 with *Meloidogyne* management in protected tomato, pepper and cucurbit systems.

ANSES — PL11 protected-crop uses

2. France • PL11 efficacy characteristics

The regulatory record expressly describes efficacy as partial and variable.

Agricultural relevance

The same regulatory record places the biological contribution within an integrated approach to root-knot nematode pressure.

ANSES — PL11 efficacy qualification

5 Crop programmes and application context

Protected tomato, pepper and cucumber are the focus for *Meloidogyne* pressure management. Root symptoms, nematode diagnosis and field history together describe the crop problem. French regulatory information for PL11 records partial and variable efficacy, placing this biological contribution within an integrated root-health programme.

Tomato and pepper

Protected tomato and pepper are PL11 crop settings for root-knot nematode management. Root galling and the distribution of nematode pressure are relevant to crop establishment and root function. The French uses identify *Meloidogyne* as the target.

Cucumber under protection

Protected cucumber is a relevant crop within the edible-skin cucurbit setting. The PL11 crop context concerns root-knot nematodes, with root condition and previous infestation helping describe the significance of the problem in continuous vegetable production.

Root-knot nematodes

Tomato • Pepper • Cucumber

PL11 • France: protected crops, *Meloidogyne* spp.; partial and variable efficacy in the authorised-use record.

6 Quality and compatibility

Identity and traceability

Strain identity specifies the biological organism. Batch traceability connects that identity with the material history and its quality record, making the relationship between the declared component and the finished formulation clear.

Biological activity and purity

Viable biological activity describes the living fungal component. Microbiological purity describes the presence of unintended microorganisms. These measures address different aspects of a microbial formulation and complement the physical powder specification.

Formulation consistency

Physical consistency describes the uniformity of the powder, while stability information describes how its relevant properties are maintained over product life. Together with biological activity, these attributes support a complete technical quality description.

Published uses relate to the specified strain, formulation and market. Product uses follow the applicable label.

7 Product questions

How does Nemia differ from Nemia B16?

Nemia centres on the fungus *Purpureocillium lilacinum* PL11; Nemia B16 centres on the bacterium *Bacillus nematocida* B16. Their biological identities, formulations and supporting crop records are separate.

What level of efficacy do the PL11 records describe?

The French regulatory record describes partial and variable efficacy against root-knot nematodes in the specified protected-vegetable uses. This positions PL11 within an integrated root-health programme.

8 References and technical documents

Product specifications and application guidance are provided in the applicable technical data sheet and market label.

1. ANSES — PL11 protected-crop uses

Product information and technical support

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