



IRA Biotech

SAFE ROOT

Biological Protection Against Nematodes

IRA Safe Root is a biological product based on a selective strain of naturally-occurring entomopathogenic fungus *Paecilomyces lilacinus*. The product contains spores and mycelial fragments of *P. lilacinus*.

Microorganisms are present in lyophilised (freeze-dried) dormant form, ensuring stability during storage. They become active upon exposure to moisture and favourable soil conditions. Stable across a broad range of conditions (pH-1.5–10 and temperatures up to 45°C), enabling performance in diverse environments.



Product Features

Mode of Action

The microorganisms in Saferoot interact with plant-parasitic nematodes through natural biological processes, including colonisation of the rhizosphere and association with nematode life stages. Upon favourable conditions, the fungal spores germinate and establish in the soil environment, where they may interact with nematode eggs and juveniles. These interactions assist in reducing nematode activity and support improved root health as part of an integrated soil management program.

Expected Results

- ❖ Assists in reducing the impact of plant-parasitic nematodes
- ❖ Promotes improved root development and root system integrity
- ❖ Enhances plant vigour under nematode-associated stress conditions

Safety Directions

- ❖ Avoid inhalation of dust or spray mist
- ❖ Wash hands after use
- ❖ Use in well-ventilated areas

Environmental Protection

- ❖ Contains naturally occurring microorganisms
- ❖ Do not contaminate waterways with product or container

Product Analysis:

Paecilomyces Lilacinus.....	2%
Trichoderma viridi.....	2%
Dextrose.....	96%

Physical Characteristics:

White Powder, Water Soluble, pH: 5.5-8.5

Application:

Application Rate:

- ❖ 100 grams per hectare

Application Method:

- ❖ Soil application or via drip irrigation (fertigation)
- ❖ Dissolve 100 g in 700–1000 litres of water per hectare
- ❖ Apply uniformly to the root zone
- ❖ Foliar Spray 100g in 500 litres of water and spray for 1 hectare

Compatibility:

Compatible with most organic inputs. Avoid mixing with chemical fungicides, bactericides, or disinfectants.

Storage

- ❖ Store below 30°C in a cool, dry place
- ❖ Keep container tightly closed
- ❖ Protect from direct sunlight

