

DOSAGE RATES

- ▶ Protect™ can be applied at a rate of 400 l/ha or 600 l/ha. In highly infested soils utilise the higher rate.
- ▶ Application of Protect™ as a soil treatment must be done 7 days prior to planting.



APPLICATION OF PROTECT™ IN THE SOIL

- ▶ Apply as an overall application to a well prepared land/seedbed that has been irrigated to field capacity the day before.
- ▶ It is important to ensure that Protect™ is evenly incorporated throughout the root zone where protection is needed. This can be achieved through mechanical incorporation and/or via irrigation into the root zone.
- ▶ After incorporation the field must be irrigated with 10mm of water to seal the bed and further enhance distribution of the product in the zone.
- ▶ The following day the field can be drawn into beds for subsequent planting in 7 days time.
- ▶ Protect™ can be applied via dripper irrigation if your system provides full area coverage.



“Protect™ controls the following soil borne pathogenic fungi: Fusarium, Pythium, Phytophthora and Rhizoctonia”.

Prof. Nico Labuschagne, Plant Pathologist



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NULANDIS

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AN EMULSIFIABLE CONCENTRATE SOIL TREATMENT FOR THE CONTROL OF PLANT PARASITIC NEMATODES AND CERTAIN SOIL BORNE FUNGI

Active ingredient: furfural (aldehyde) 990g/l • Hazard Group 1b: Toxic

REGISTERED AND FORMULATED BY: ILLOVO SUGAR LTD.
Co. Reg. No. 1906/000622/06 • PO Box 194, Durban, 4000 • Tel: (031) 508-4300



SOIL TREATMENT

An emulsifiable concentrate soil treatment for the control of plant parasitic nematodes and certain soil borne fungi.



INTRODUCTION

Field trials conducted in South Africa and the United States of America have demonstrated that Protect™ is effective as a soil treatment.

Protect™ has been tested in field trials conducted by Inter Regional Program 4 (IR4) which is a joint program between the United States Environmental Protection Agency and United States Department of Agriculture. IR4 evaluates products as a replacement for methyl bromide and field trials have shown that Protect™, when partnered with a herbicide, performs similarly to methyl bromide.

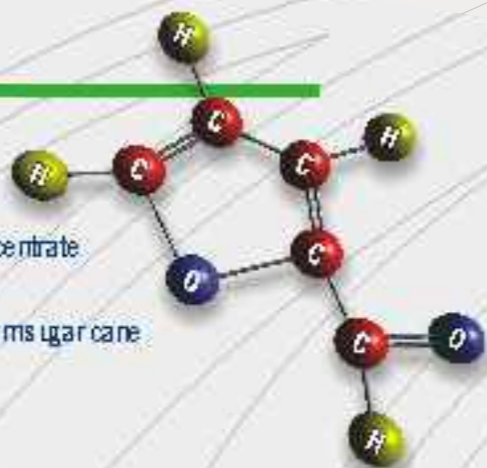
Protect™ has demonstrated efficacy in the control of:

- ▶ Plant parasitic nematodes
- ▶ Fungal pathogens: Pythium, Fusarium, Phytophthora, Rhizoctonia



CHARACTERISTICS

General name : Furfural
 Formula : C₅H₄O₂
 Formulation : Emulsifiable concentrate
 Chemical class : Aldehyde
 Origin : Manufactured from sugarcane

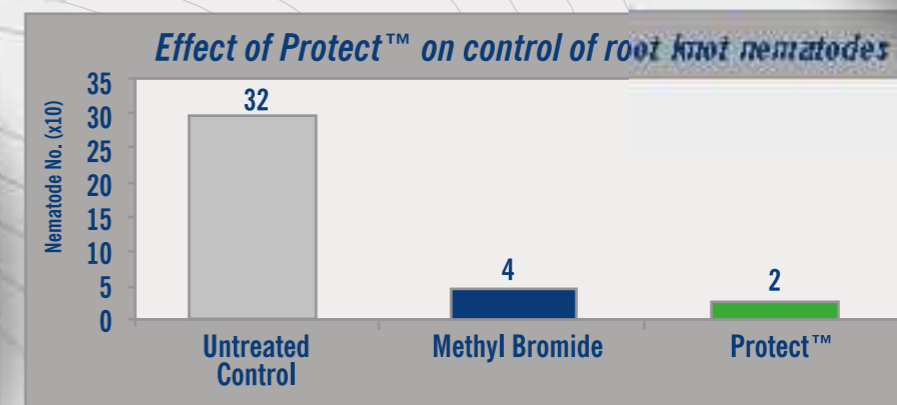


MODE OF ACTION

► Protect™ is a contact soil treatment that kills nematodes by irreversibly damaging the cuticle and kills fungi by reacting with the cellular wall and disrupting cellular functions.



►►► NEMATODE CONTROL

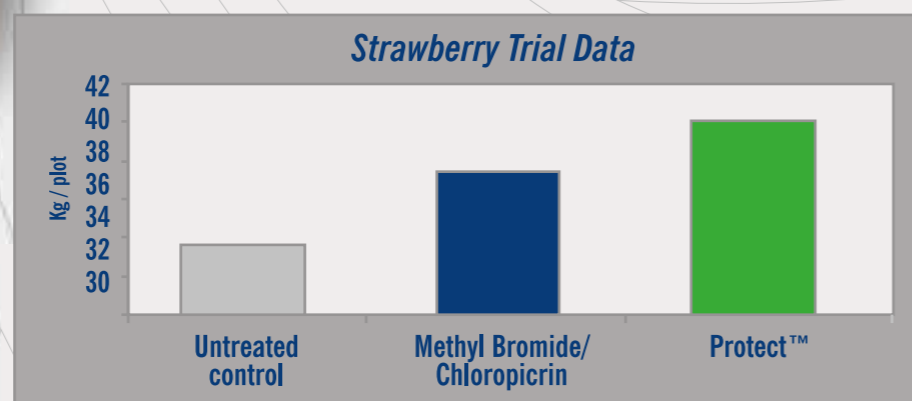


- A dosage of 400ℓ/ha of Protect™ applied 7 days pre-plant.
- The above data demonstrates that Protect™ is effective in controlling parasitic nematodes.

►►► FUNGAL CONTROL

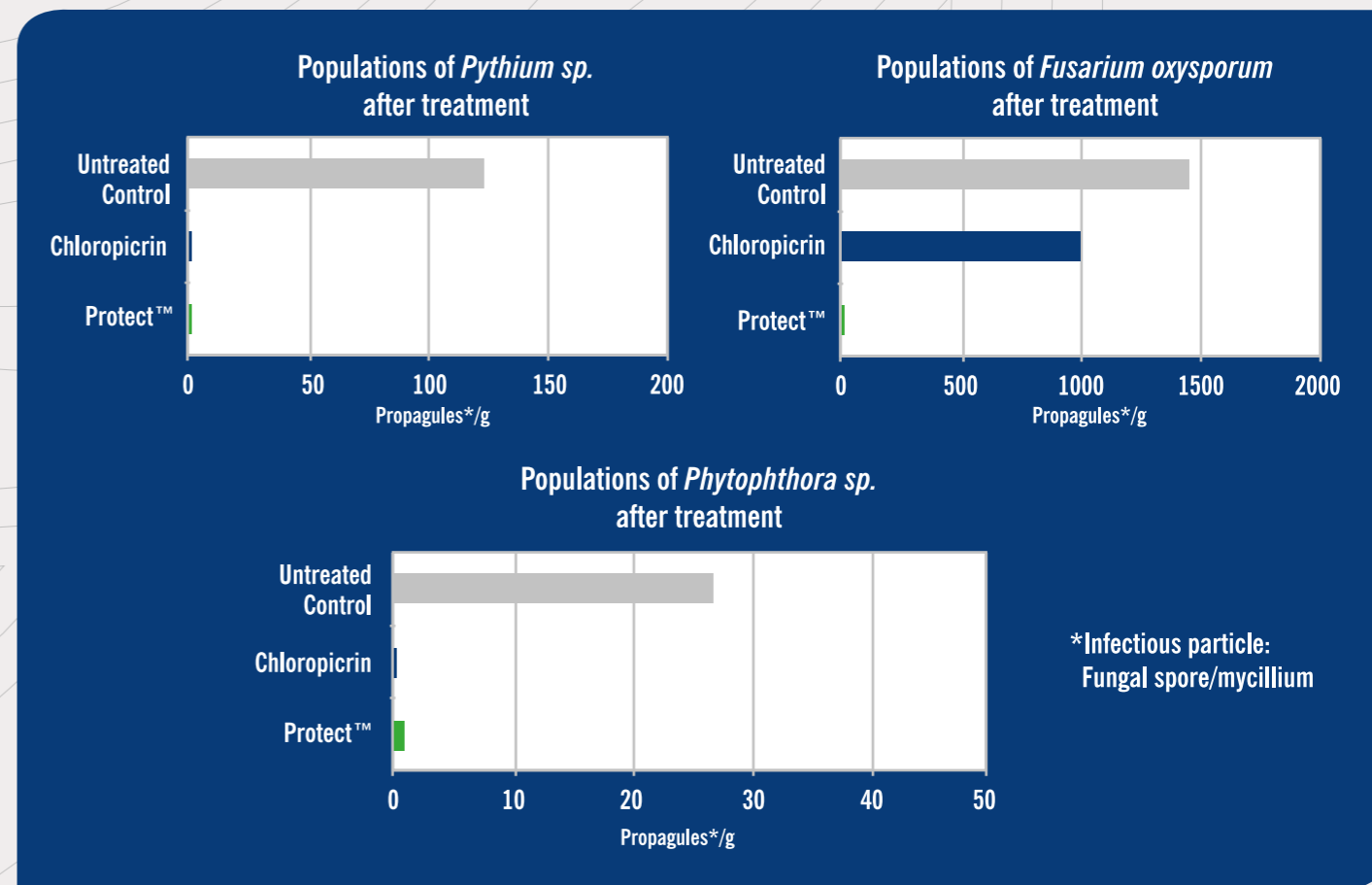
TRIAL RESULTS

►►► YIELD DATA



- A dosage of 400ℓ/ha of Protect™ applied 7 days pre-plant.
- YIELD INCREASE RELATIVE TO CONTROL

Methyl Bromide	: 11%
Protect™	: 19%



soil treatment