



## HOME

PROTECT IS AN EMULSIFIABLE CONCENTRATE SOIL TREATMENT:

- for the control of plant parasitic nematodes
- and certain soil borne fungi
- With an active ingredient - Furfural.

**Protect** has been formulated and manufactured by [Illovo Sugar Ltd.](#)

## PRODUCT OVERVIEW

### Proven effectiveness

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 Environment Protection Agency and the 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

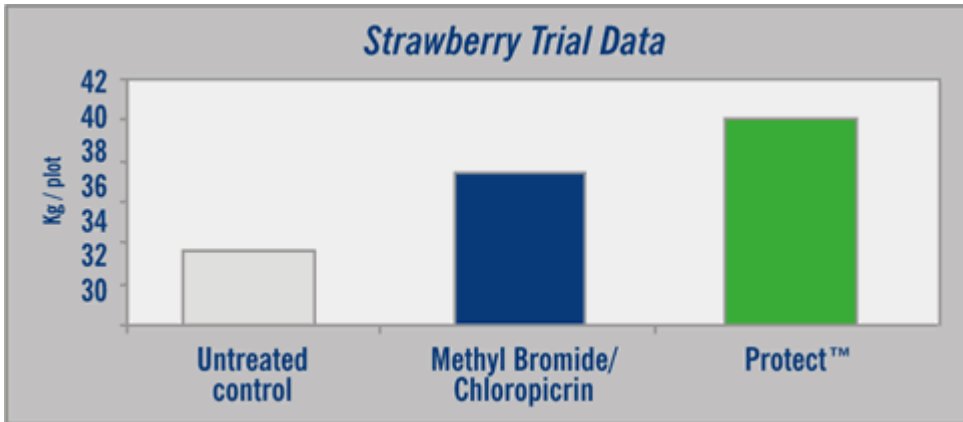
General name	: Furfural
Formula	: C <sub>5</sub> H <sub>4</sub> O <sub>2</sub>
Formulation	: Emulsifiable concentrate
Chemical class	: Aldehyde
Origin	: Manufactured from sugar cane

## MODE OF ACTION

Protect is a contact soil treatment that kills nematodes by irreversibly damaging the cuticle

Protect kills fungi by reacting with the cellular wall and disrupting cellular functions.

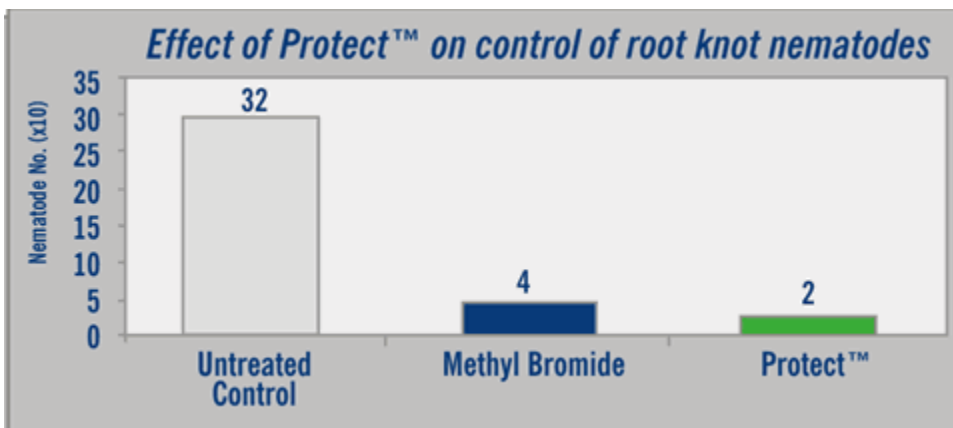
## TRIAL RESULTS



- A dosage of 400l/ha of Protect applied 7 days pre-plant.
- Yield increase relative to control

Methyl Bromide : 11%  
Protect : 19%

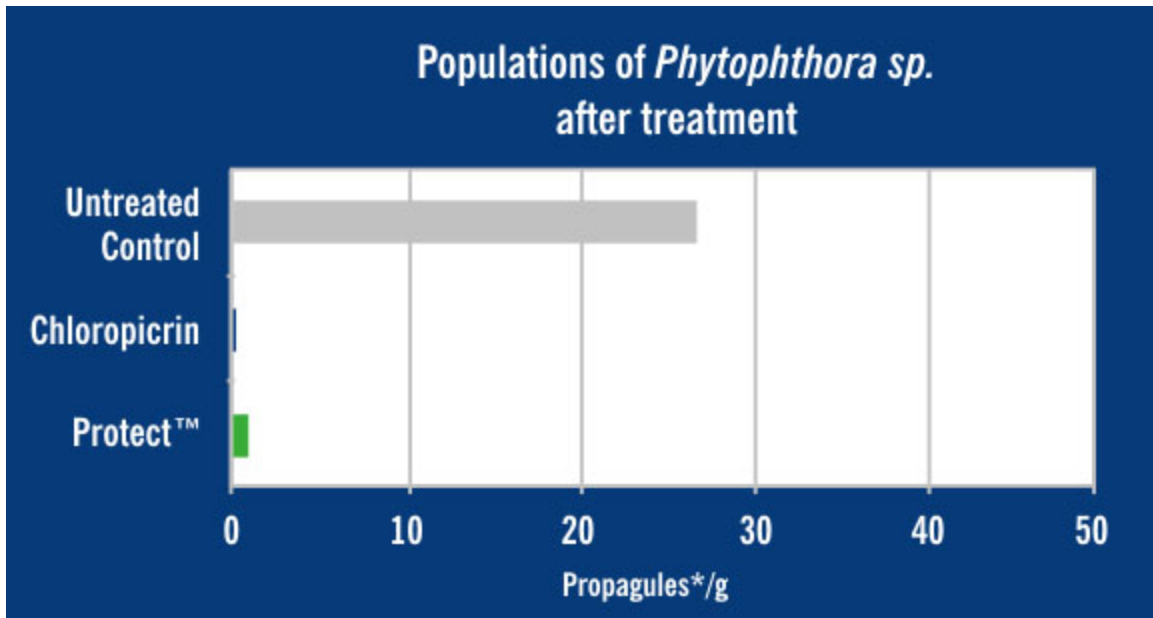
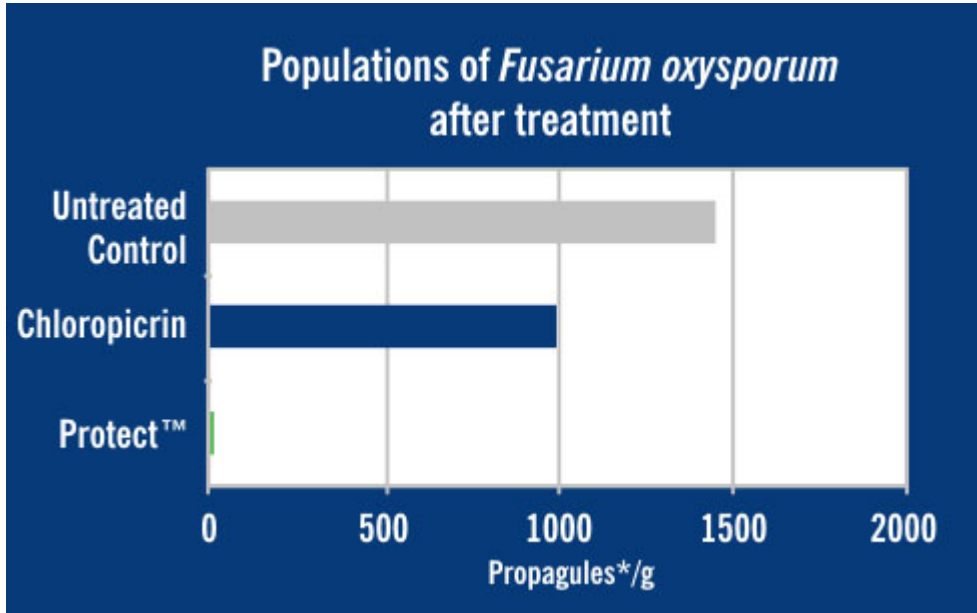
## NEMATODE CONTROL

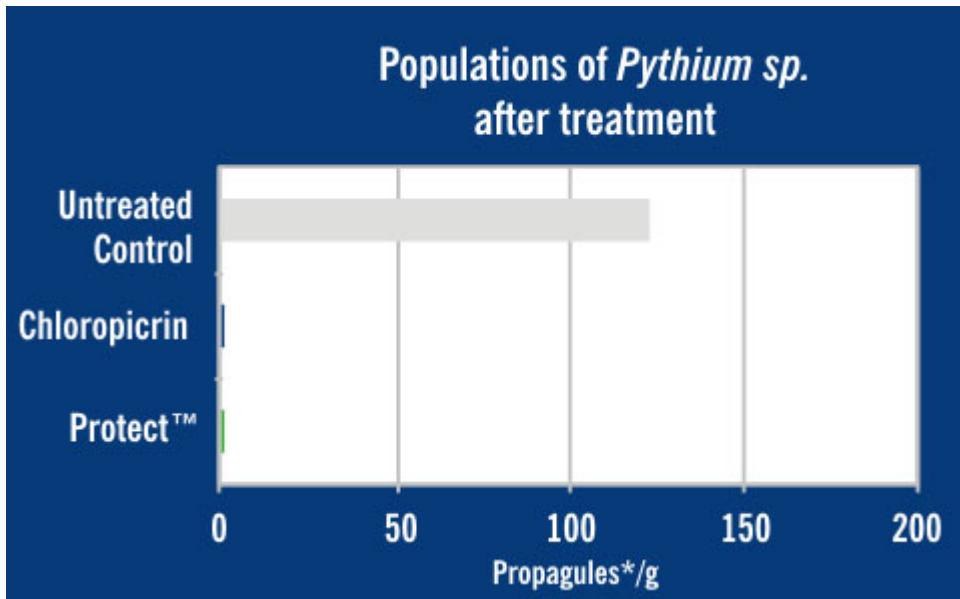


A dosage of 400l/ha of Protect applied 7 days pre-plant.

The above data demonstrates that Protect is effective in controlling parasitic nematodes.

### FUNGAL CONTROL





## **DOSAGE RATES**

Protect can be applied at a rate of 400ℓ / ha or 600ℓ / ha.  
In highly infected soils utilise the higher rate.

Application of Protect as a soil treatment must be carried out 7 days prior to planting.

## **APPLICATION**

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 using 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 the system provides full area coverage.

**LABEL**

[Click here](#) to download the English version of the label in PDF format. 

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