Perfect Shield

Green!

PERFECT SHIELD IS AN EPOCH-MAKING SOIL PERMEATION ACTIVE AGENT

- Soil particles, including existing organic matter, pathogenic fungus and insect pest all have water repelling properties.
- In order to apply water, liquid fertilizers, and agricultural chemicals evenly and effectively into the soil, it is necessary to add the soil permeation active agent, such as "PERFECT SHIELD".
- It is necessary that water (i.e. rainfall and irrigation water), liquid fertilizers, and agricultural chemicals not only wet the soil but also permeate into the soil.

Benefits:

"PERFECT SHIELD" IS AN EPOCH-MAKING SOIL PERMEATION ACTIVE AGENT CARRYING THESE CONDITIONS:

- Enable water to promtly permeate into the soil.
- Permeates into the colony of pathogenic fungus.
- Has fungistatic action.
- Permeates into the insect pest.
- Reduce nematode population. Provide tremendous control of nematode without using hazardous chemical.
- Acts upon the phosphoric acid fixed in the soil and converting it into an available form for use by turf and plants.
- Can be use as soil and foliage wetting agent.
- "PERFECT SHIELD" is safe.



Properties:

Components	:	Non-ionic Surfactant
Properties	:	Transparent Liquid
pH	:	6.5 ± 0.5 (1% Solution at 25°C)

Safety data:

Ordinary Substance

Fish Toxicity	:	Classified as A (This is the safest class)
Skin Irritation	:	Non irritant to skin

Packing:

- 500ml per bottle.

Strorage:

- Keep in dry place.
- Keep away from foodstuff and children.

Application:

"PERFECT SHIELD" easily disolves in water. Dilute and apply depending upon your purpose.

Single Application	: 1,000 - 2,000 Times
Mixing with Fungicide	: 1,000 - 2,000 Times
Mixing with Pesticide	: 1,000 - 2,000 Times
As Soil Wetting Agent	: 1,000 - 2,000 Times
As Sticker / Foliage Wetting Agent	: 2,000 - 5,000 Times

Nematode control:

Apply "PERFECT SHIELD" at 1 liter per Ha
"SOIL RESTORE" at 3 to 5 liter per Ha
"DR. GREEN DRENCHING" at 2 to 4 liter per Ha
Every 3 months interval.

REMARKS

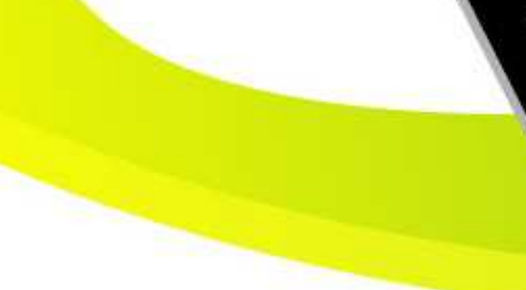
1. When mixing with other recommended product, test the mixture and its effect prior to application.
2. In the case of mixing with other products, add "PERFECT SHIELD" to the prepared solution and mix well before application.
3. In the case of foliage application, to prevent injury to plants, avoid application in the day time under high temperature.

Hextar Landscape Services Sdn. Bhd. (277564-V)
Tel : 603-5162 8477 Fax : 603-5161 8478

The Effect of PERFECT SHIELD Treatment

1. Permeation Power

Soil Medium



PERFECT SHIELD



Soil Medium



Water **"PERFECT SHEILD"** (1,000 times dilution)

(Photograph was taken 45 mins after the watering of each medium.)

Wetting and penetration of Mycelial mat of Fungus (Rhizoctonia, Helminthosporium, Fusarium, Pythium and etc) by PERFECT SHIELD



2. Fungistatic Action



Untreated Medium (Rhizoctonia spread & cover the entire medium)	Treated with "PERFECT SHIELD" (Rhizoctonia unable to spread)

Treatment on Mycelial mats of *Lepista sordida*



Daconil	Interval (Untreated)	"PERFECT SHIELD" & Daconil	Untreated

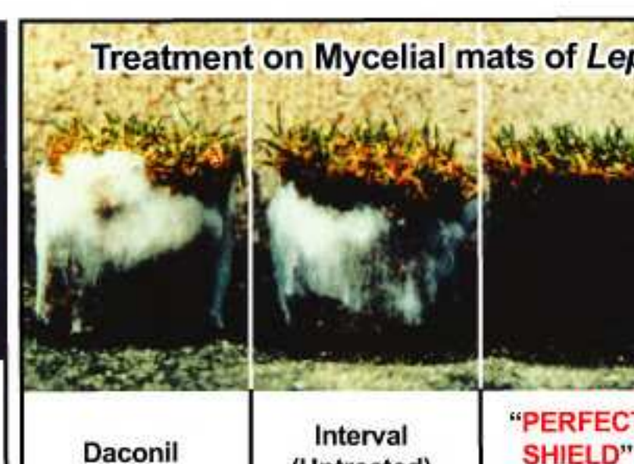
Permeation Power to the Colony of Pathogenic Fungus



3. Effect of "PERFECT SHIELD" in Bursting of Zoospore



Zoospore (Phase-contract microscope) x 400



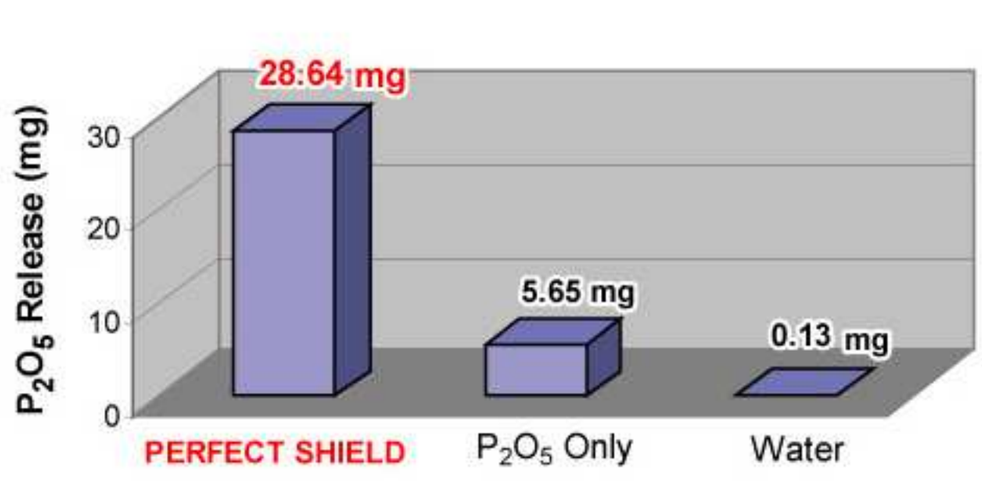
Bursting of Zoospore: Photograph was taken at 3 sec after the treatment of "PERFECT SHIELD". (4,000 times dilution). (Phase-contract microscope) x 400

Concentration of "PERFECT SHIELD" (Dilution rate)		Time required for Bursting
Blank (water)		-
PERFECT SHIELD	80,000 times	-
	32,000 times	-
	16,000 times	10 second
	8,000 times	5 second
	4,000 times	3 second
	1,000 times	2 second

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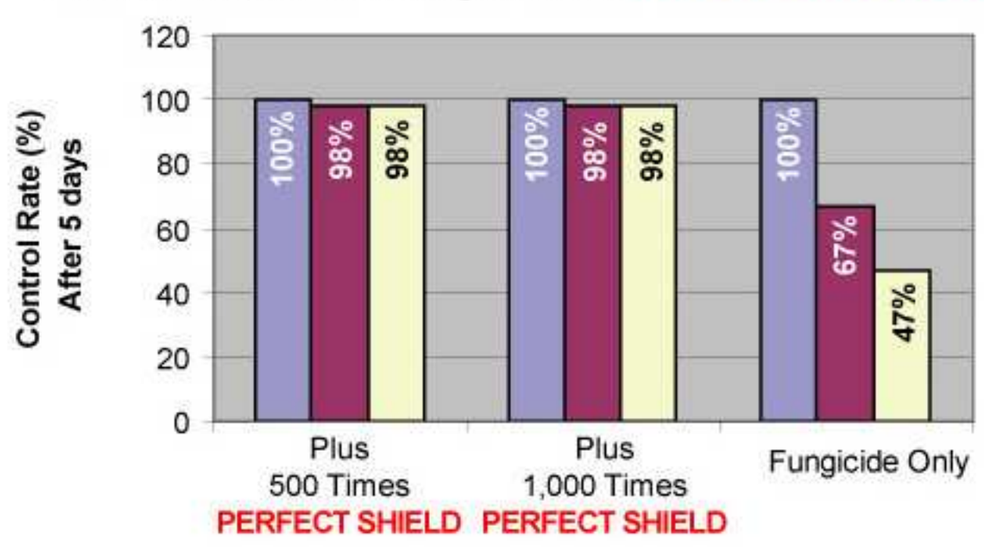
4. Effect on P_2O_5 Release in Soil



Note: P_2O_5 : 52.15% (1,200mg / 2.4kg soil)
PERFECT SHIELD (0.2%)

5. Control of Fungus

Control of Fungus With Combination of Fungicide & PERFECT SHIELD

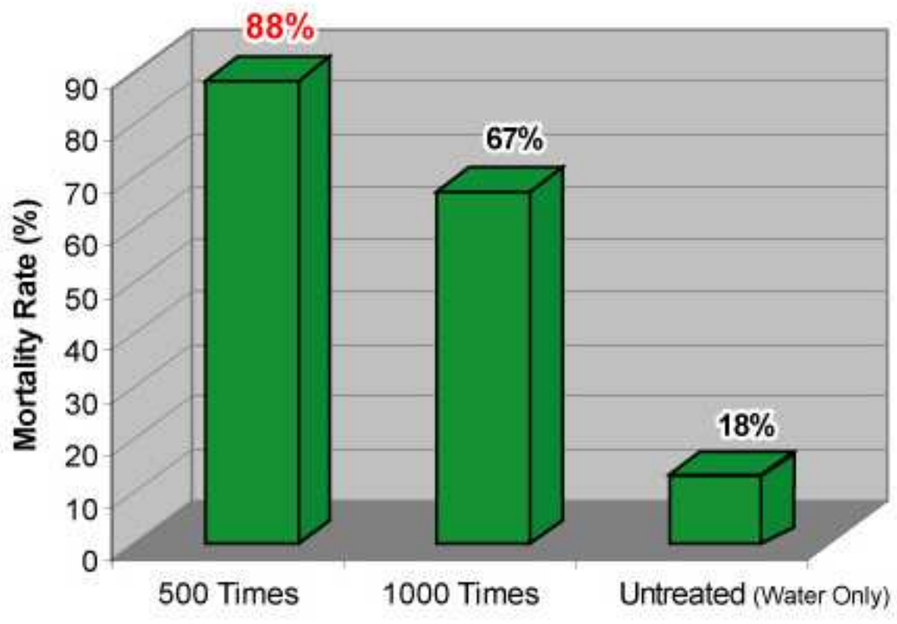


Treatment: Dilution of PERFECT SHIELD

Note: Treatment with combination of fungicide & PERFECT SHIELD give excellent control of fungus.

6. Control of Nematode

Control of Nematode in Infected Soil after 3 Days



Treatment: Dilution of PERFECT SHIELD

Note: About 90% of nematode killed after 3 days of treatment at dilution 1:500



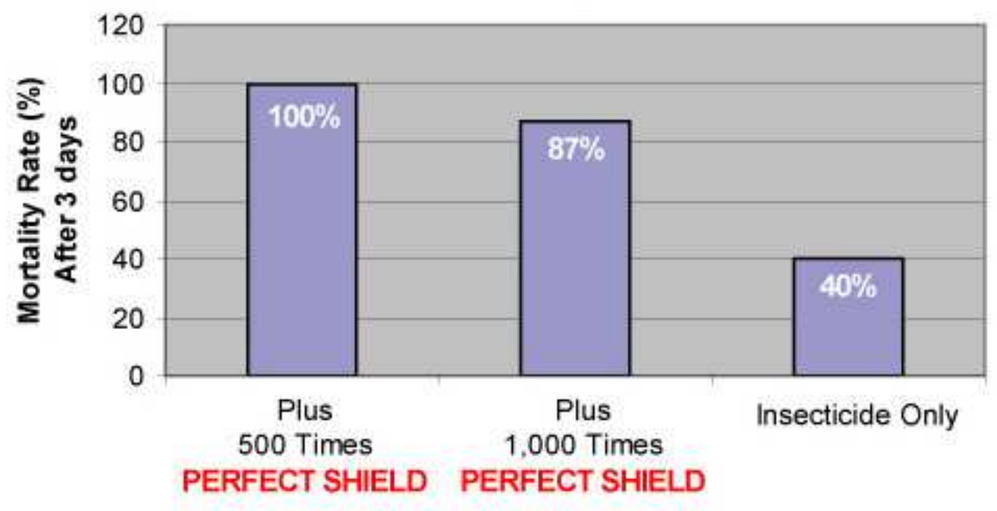
Nematode



Nematode

7. Control of Insect (Larva)

Control of Insect With Combination of Insecticide & PERFECT SHIELD (3,000 Times Dilution) & PERFECT SHIELD



Treatment: Dilution of PERFECT SHIELD

Note: Treatment with combination of insecticide (3,000 times dilution) & PERFECT SHIELD (500 times dilution) given 100% control after 3 days



Pest Larva



Pest Larva

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Evaluation of Field Test

- Relieve compaction.
- Improve aeration.
- Improve water penetration & permeation.
- Reduce disease and nematode attack.

Treatment of **PERFECT SHIELD** and **Soil Restore**

A





Before





After

B





C





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