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TM

FarMore® Technology Video

FarMore Technology (FarMore Technology.url)

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FarMore – Expect More

Product Description and Performance

Vegetable Seed Treatment Platform

FarMore® Technology

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Expect More™

™

FarMore, creating a novel Seed Care technology

FarMore® Technology

- ✓ The first **comprehensive seed-delivered system**
- ✓ An **evolving seed care technology platform** containing various seed protection and enhancement technologies
- ✓ Enhances **performance and value** of each seed

FarMore® Technology

BRAND ARCHITECTURE

Expect More™

FarMore® F300 — Three different fungicides

FarMore® FI400 — 3 fungicides+ insecticide

FarMore® FI500 Onion — 3 + 2 insecticides with a crop qualifier

FarMore®

- Explanation of Active ingredients
  - Fungicides
    - Apron XL® – mefenoxam
    - Maxim ® 4FS – fludioxonil
    - Dynasty ® – azoxystrobin
  - Insecticides
    - Cruiser ® – thiamethoxam
    - Regard® – spinosad

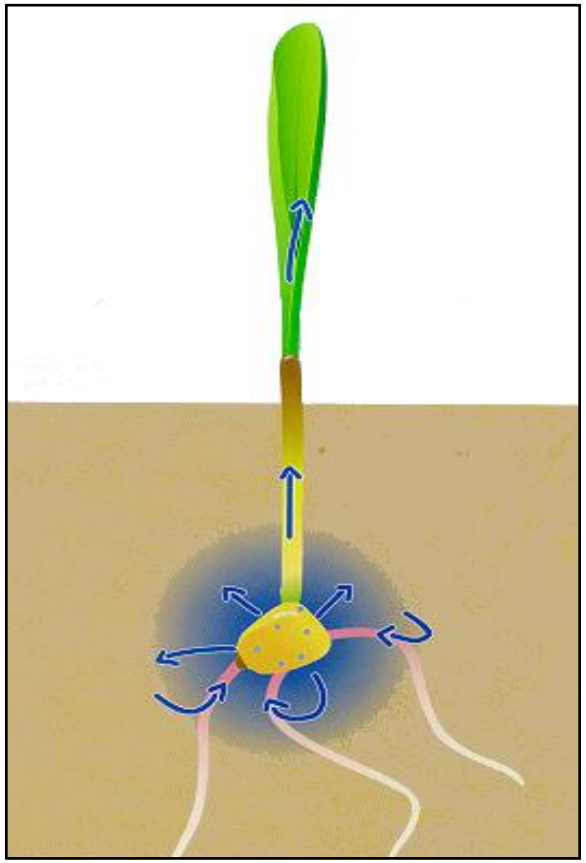
Mefenoxam (Apron) General Attributes

- Specific Oomycete control: e.g. *Pythium* and downy mildew
- Systemic and is absorbed by the roots and translocated to the rest of the plant.
- Works by preventing mycelial growth
- Part of the FarMore package
- Other brands include: Ridomil.

Apron

Expect More™

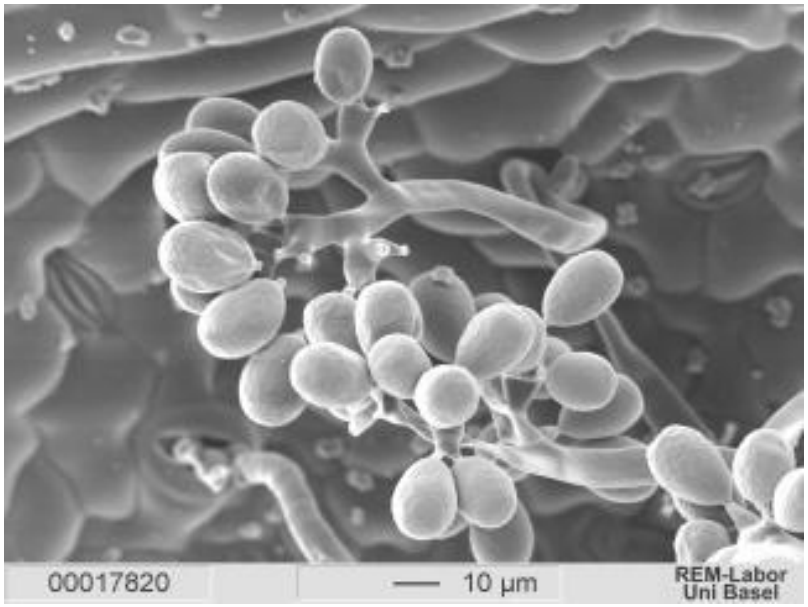
Biological Properties



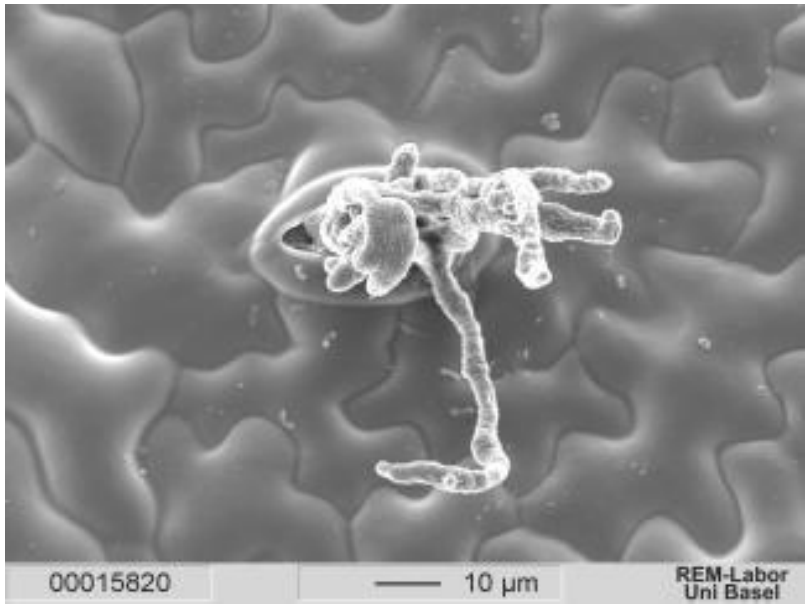
- Mefenoxam partly penetrates in the seed after application.
- It is also re-distributed in the soil around the seed during germination.
- It is then absorbed by the roots, and redistributed into the plant

Apron : Stops Spore Production

Mefenoxam stops mycelial growth and spore formation – effectively stopping the disease from progressing.



No treatment,
spore production



Mefenoxam treatment,
no sporulation

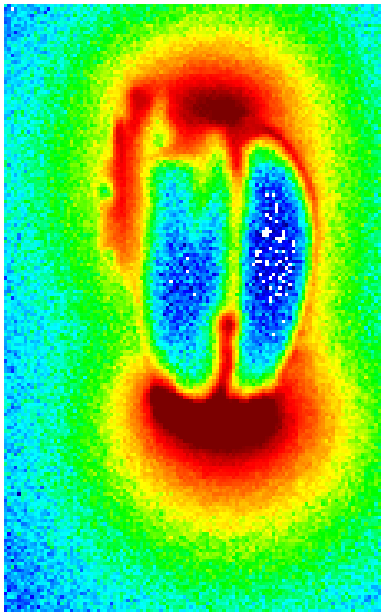
Apron summary

- Systemic fungicide
- Controls many pythium species and downy mildew
- Stops spore production
- One of the active ingredients in FarMore

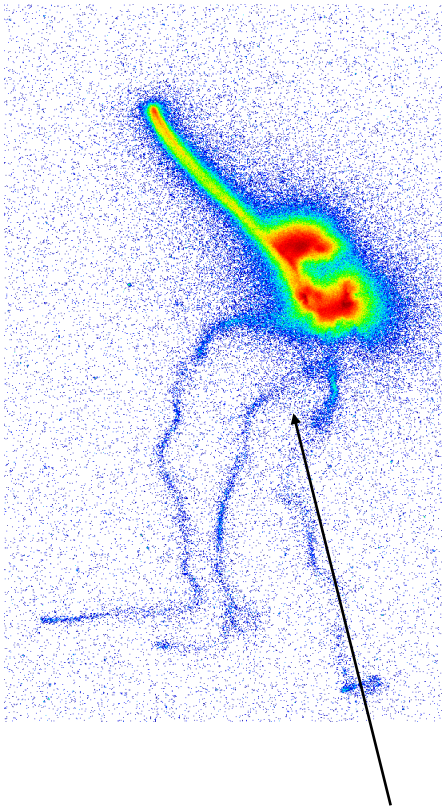
Fludioxonil (Maxim) General Attributes

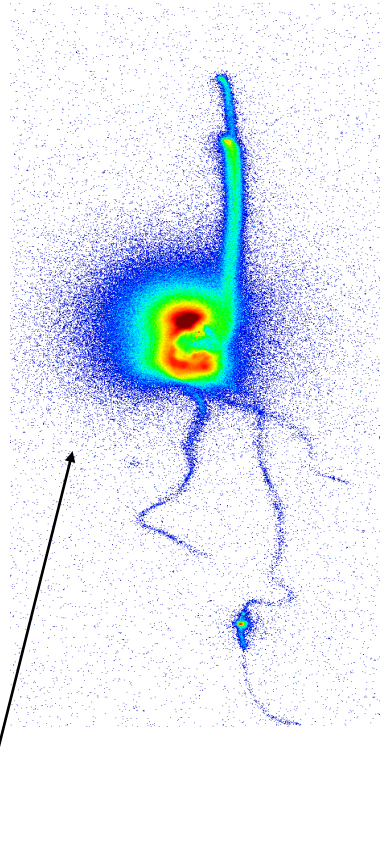
- Broad spectrum: Rhizoctonia, Fusarium, Botrytis and others.
- Works by inhibiting protein kinase (PK-III) involved in the regulation of glycerol synthesis
- Persistent in Rhizosphere. Does not readily degrade and is virtually immobile in soil.
- Non-systemic
- Brands include: Cannonball, Scholar, Graduate, and Medallion.

Maxim activity protecting seed/seedling



Seed 1 day





Fludioxonil –Post emergence

Maxim summary

- Non-Systemic fungicide
- Controls *Fusarium, Rhizoctonia, Botrytis*
- Provides protection around the root zone
- One of the active ingredients in FarMore

Azoxystrobin (Dynasty) General Attributes

- Excellent systemic Rhizoctonia activity.
- Works by inhibiting the mitochondrial respiratory chain and ATP formation
- Azoxystrobin is absorbed into the hypocotyl offering protection of the seedling at the soil line!
- Some activity for Pythium and Phytophthora species. Not a stand alone solution but in concert with mefenoxam it is helpful.
- Brands include: Quadris, Abound, Heritage and many others!!!

Dynasty summary

- Systemic fungicide
- Provides protections against many seed and seedling diseases such as Rhizoctonia
- Mitchondrial respiration inhibitor
- One of the active ingredients in FarMore

Disease Protection From FarMore: Leafy

Expect More™

	F300				
	MFX	FDX	AZO		Thiram
Pythium	+++	---	++		++
Fusarium	---	+++	---		+
Rhizoctonia	---	++	+++		+
Downy Mildew	++	---	++		--
S. sclerotium	---	+	++		--
Verticillium			+		

+++ Strong, ++ acceptable + Weak

FarMore Disease Protection: Onions

Expect More™

	F300				
	MFX	FDX	AZO		Thiram
Pythium	+++-	--	++		++
Fusarium	---	+++	+		+
Rhizoctonia	---	++	+++		+
Botrytis	---	+++	--		--
Downy Mildew	++	---	++		--

+++ Strong, ++ acceptable + Weak

FarMore® Technology

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FarMore F300: Cabbage Under Pythium Pressure

Untreated

FarMore F300

Cabbage Plants
Under *Pythium* Pressure

Insecticide Component: Thiamethoxam (Cruiser) general attributes

- Seed-applied insecticide
- Excellent compatibility with other crop protection products
- Brand names include: Cruiser, Platinum, and Actara

Cruiser Mode of Action

- Interferes with nicotinic acetylcholine receptors in the insect nervous system
- Both contact and ingestion activity
- Feeding stops within hours
- Death occurs quickly, usually within 24-48 hours

Cruiser summary

- Systemic insecticide
- Controls many sucking and chewing pests
- Rapid root uptake
- Excellent residual control
- Low use rates
- Provides protections against many sucking and chewing insect pests such as aphids and whitefly
- One of the active ingredients in FarMore

Spinosad (Regard) general attributes

Expect More™

- Active ingredient description:
  - Spinosad is composed of spinosyns A and D, substances produced by aerobic fermentation of the actinomycete species Saccharopolysora spinosa.
  - This rare species was found in soil samples from an island in the Caribbean in 1982.
  - Actinomycetes are filamentous bacteria found in the soil that give it a sweet ‘healthy’ smell.
- Brand names include: Entrust and Success

Regard

- How it works:
  - Spinosad is a fast-acting, somewhat broad-spectrum material that acts on the insect primarily through ingestion, or by direct contact
  - It activates the nervous system of the insect, causing loss of muscle control.
  - Continuous activation of motor neurons causes insects to die of exhaustion within 1-2 days.

Regard summary

- Insecticide with limited systemicity
- Active against root pests as a seed treatment
- Biological compound
- OMRI certified
- **An ingredient in FarMore FI500**

Bringing plant potential to life

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ROOTING POWER™ Video

Root Health Informational Video (Root Health Informational Video.url)

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