



# Protecting Onion Crops from the Start

 **FarMore® FI500**  
Onion

**syngenta®**

TM





Photo courtesy of Champion Seed Company

FarMore® Technology from Syngenta is the first comprehensive combination of separately-registered seed protection products, proprietary application technologies and dedicated seed treatment services to maximize vegetable production value by enhancing performance and quality. Offering maximum return on investment potential and grower convenience, FarMore Technology includes a seed company or seed technology provider applied combination of separately registered seed protection products and application protocols.

This proprietary seed protection solution provides direct-seeded onion growers with consistent performance to enhance seedling emergence, plant stand establishment, early-season vigor and plant health, and protect yield potential.

The latest evolution in the FarMore Technology platform is FarMore FI500 fungicide/insecticide, which offers direct-seeded onion growers early-season disease and insect protection for a healthy crop start.

### **PROTECTING ONIONS FROM INSECTS WITH FARMORE FI500**

Containing three fungicides and two powerful seed-applied insecticides, FarMore FI500 provides a new opportunity for onion producers to protect their high-value crop from the start. Spinosad, an organic compound derived from fermentation of naturally occurring organisms,

and thiamethoxam, a second generation neonicotinoid, join forces to shield onion crops from some of the most damaging early-season insects including:

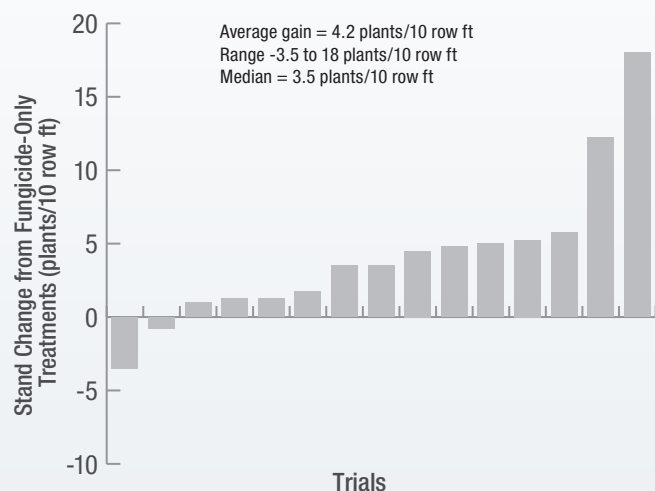
- Onion maggots
- Seedcorn maggots
- Early-season activity on thrips

The early-season insect protection offered by FarMore FI500 may also reduce the infection and spread of certain viral diseases vectored by these insects.

The key to success with this seed-applied approach is that insecticides are present around the seed at planting and during germination, therefore warding off any challenges that may come from insects in the soil or on the seed. With this approach, the grower is not required to play “catch-up” with insects, which can be ineffective and very expensive.

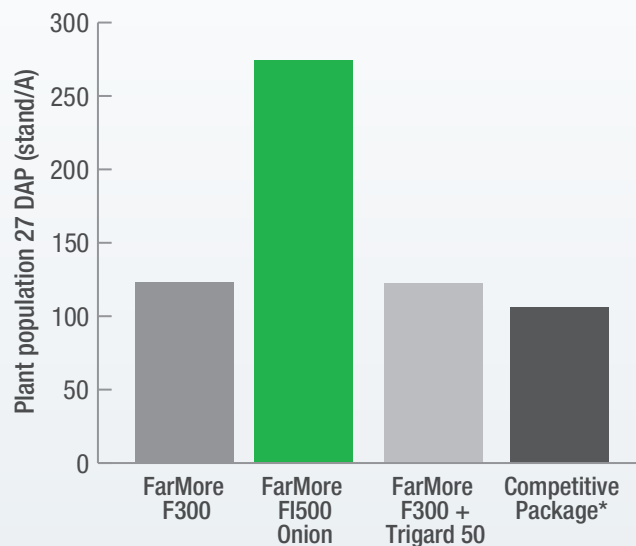


## FarMore FI500 vs. Fungicide Only



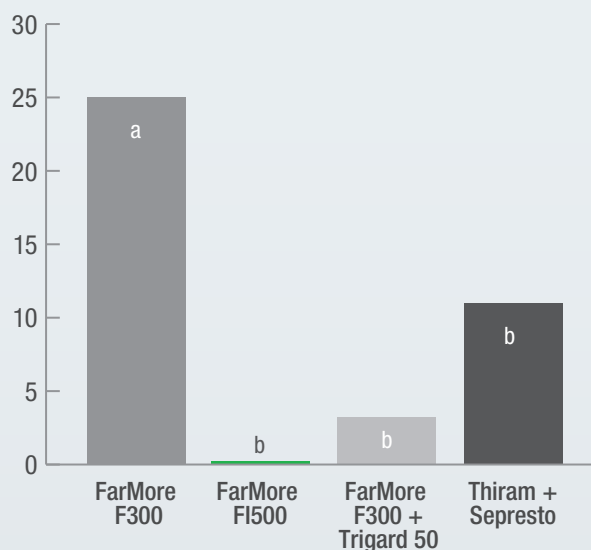
Trials from Washington, Oregon, Idaho, Utah and New York  
Trials were non-replicated large plot side-by-sides conducted by third party contractors and seed dealers  
Average vigor rating for FI500 treated plots = 3.3 (Visual Rating 1-4, 4 = Best) (Cruiser = .2 mg ai/seed)  
Average vigor rating for fungicide-only treated plots = 2.7 (Visual Rating 1-4, 4 = Best)

## FarMore FI500 Onion: Seedcorn Maggot, *Delia platura*



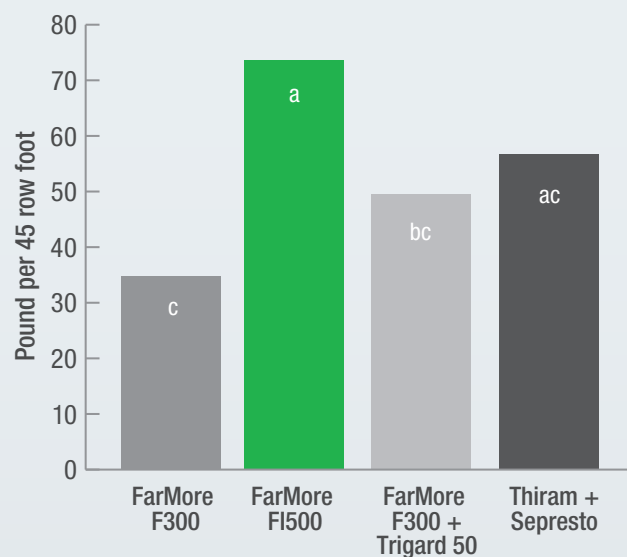
TBZ Included in Base Treatment (2011 trial)  
USWFOU5822011: Hermiston, OR  
Note: Base Treatment includes Apron XL 7.5 + Maxim 2.5 + Dynasty 2.5 + Mertect® 50 g a.i./100 kg seed  
\*Competitive Package: Thiram + Allegiance® + Coronet® + Sepresto  
LSD = 43,703

## Onion Maggot Feeding Site Counts



USWFOU4902010: Salem, OR

## Total Yield

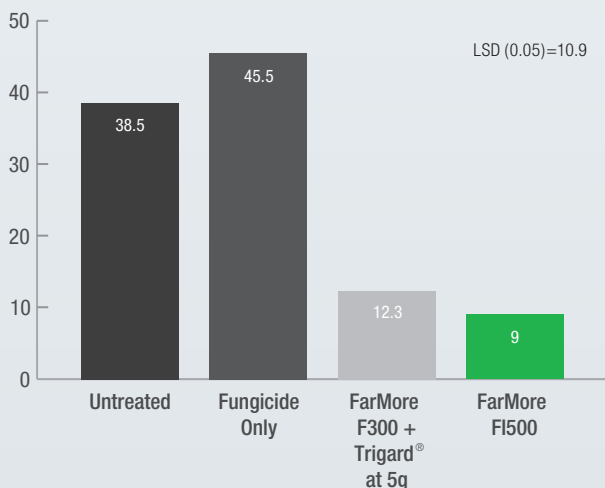


USWFOU4902010: Salem, OR

## ONION MAGGOT LIFE CYCLE

Onion maggots overwinter as pupa in a dormant stage in the soil. An adult female onion maggot will lay up to 200 eggs around the base of the small onion seedlings in her 30-day lifespan. When the eggs hatch, the larvae will cause damage by using their hooks to bore into the plant. The first generation of onion maggots will cause the plant to wilt and eventually become flaccid. Trying to pull up the wilted plant causes it to break just below the rotting stem of the seedling. The second generation of onion maggots that hatch will feed on the onion bulb, creating a deformed onion that is not suitable for market and could possibly spread disease and fungus to the plant. The third generation of onion maggots occurs around the same time as harvest. Usually these eggs are laid directly on the bulb, which can destroy a crop while it is in storage, or they will be laid on the soil next to and beneath the dying onions. Left untreated, the damaging effects of onion maggots can lead to a 25-percent loss of crop.

### Onion Maggot Protection



Source: New York trials.

Results: Percent cumulative number of dead plants due to onion maggot damage (9 evaluations – 37-80 DAP)



## BROAD-SPECTRUM DISEASE PROTECTION FROM FARMORE FI500

FarMore FI500 contains mefenoxam (Apron XL<sup>®</sup> fungicide), fludioxonil (Maxim<sup>®</sup> 4FS fungicide) and azoxystrobin (Dynasty<sup>®</sup> fungicide). These three proven and complementary fungicides provide the first line of defense and protection against several key onion seed and seedling diseases including:

- *Rhizoctonia*
- *Fusarium*
- *Pythium*
- General damping-off and seedling blight

The three different fungicides in FarMore FI500 are directly and collectively effective against these pathogens and often complement genetic tolerances to these diseases. These three fungicides offer different but complementary active ingredients, expanding the spectrum of activity against pathogenic fungi, thereby helping the onion crop establishment.



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FarMore Technology is an on-seed application of separately registered seed protection products and proprietary application technologies. FarMore F300 contains three fungicides: Apron XL, Maxim 4FS and Dynasty. FarMore FI500 Onion contains three fungicides, Apron XL, Maxim 4FS and Dynasty, and two insecticides, Regard and Cruiser 70 WS. Apron XL<sup>®</sup>, Cruiser<sup>®</sup>, Dynasty<sup>®</sup>, FarMore<sup>®</sup>, Maxim<sup>®</sup>, Mertect<sup>®</sup>, Regard<sup>®</sup>, Trigard<sup>®</sup>, the Alliance Frame, the Purpose icon and the Syngenta logo are trademarks of a Syngenta Group Company. Third party trademarks are the property of their respective owners.

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