Xanthion™

In-Furrow Fungicide

Grow Smart™ with BASF

In-Furrow Application in Corn: Best Management Practices for Applying with a Direct Injection System

Benefits of Xanthion™ Fungicide

- Controls *Rhizoctonia* and *Fusarium* spp. and suppresses *Pythium* spp.
- Enhances root growth, seedling vigor and cold tolerance
- Complementary biological and chemical modes of action deliver longer lasting residual disease control

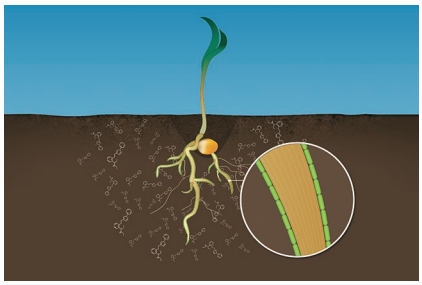
Xanthion Fungicide In-Furrow Rate, depending on row spacing. See table below.

Xanthion Fungicide In-Furrow Rate Chart			
Rate per Acre	**Rate per 1000 row feet** (fl ozs)		
	20-Inch rows	**30-Inch rows**	**36-Inch rows**
0.6 to 1.2 fl ozs **Component A**	0.023 to 0.046	0.034 to 0.069	0.041 to 0.083
3.0 to 6.0 fl ozs **Component B**	0.115 to 0.230	0.172 to 0.344	0.207 to 0.413

Always maintain a 1:5 ratio of Xanthion fungicide Component A to Xanthion fungicide Component B.

Xanthion fungicide provides convenient and effective disease control and additional plant health benefits that deliver more rapid and uniform emergence.

Complementary Biological and Chemical Modes of Action Offer Extended Residual Disease Control



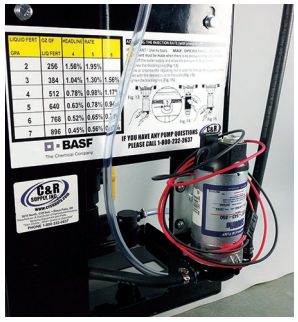
Xanthion fungicide Component B provides immediate chemical control once in soil solution; while the biological ingredients in Xanthion fungicide Component A grow and develop on the roots over time to provide additional protection against soil-borne pathogens.

Technical Information Bulletin

BASF
We create chemistry

Direct Injection Unit Overview

- The direct injection system is designed to be a simple cost effective way to apply Xanthion™ fungicide in-furrow.
- The pump operates off the volume flow of starter fertilizer.
- Can easily mount to planter and includes a 10-gallon tank and a recirculation pump that keeps the two Xanthion fungicide components dispersed evenly in the tank.
- For growers that have an existing injection system, it should be retrofitted with a recirculation pump for proper application.



How It Works

- When the carrier liquid (starter fertilizer) enters the injector, it triggers the motor piston (**Figure 1**), which begins moving up and down inside the body of the injector.
- The Dosatron draws fluid up from the Xanthion fungicide tank in an action similar to a hypodermic syringe.
- The metering plunger does the actual metering and mixing during both the up and down strokes.
- The carrier and the injected product are forced through either the two intake valves or the two exhaust valves which operate the motor piston, resulting in mixing.
- Xanthion fungicide is displaced into the mixing chamber (**Figure 2**), where it is forced through a fine screen, which is the second mixing phase.
- From there, back pressure in the hose and travel through several fittings continues to maintain constant mixing of the two products.

Figure 1

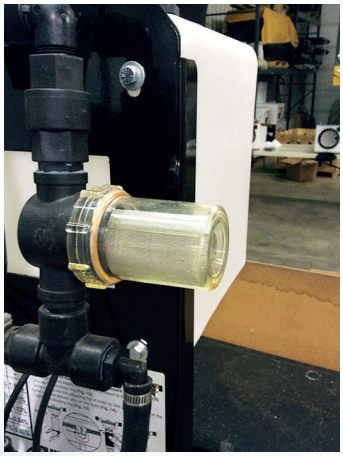


Figure 2

Mixing and Dispersement – Results of Mixing Uniformity Trials with Headline® Fungicide and 10-34-0 Liquid Fertilizer

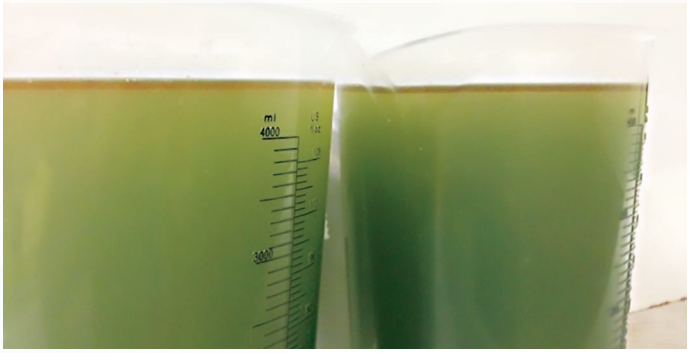
Simulated Planter Set-Up Using the Dosatron Unit Testing with an 8-Row Wilger Manifold System

A ball manifold system is the preferred distribution method for low volume flow applications. A high flow distribution method can result in discrepancies.

Equal Mixing and Distribution of Fungicide and Liquid Fertilizer

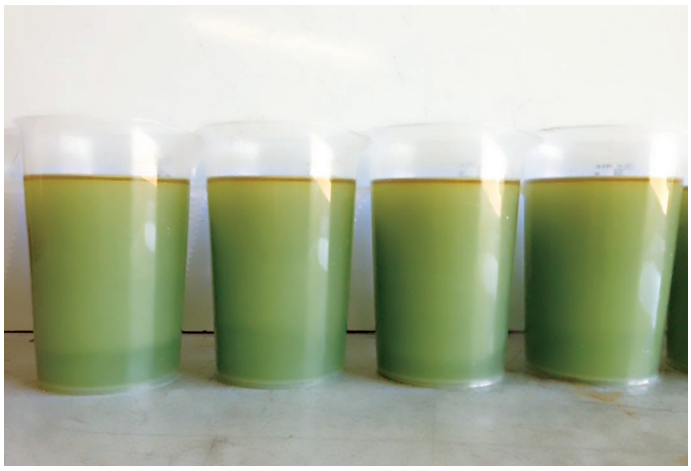
Pitcher filled with product from down stroke of Dosatron

Pitcher filled with product from up stroke of Dosatron



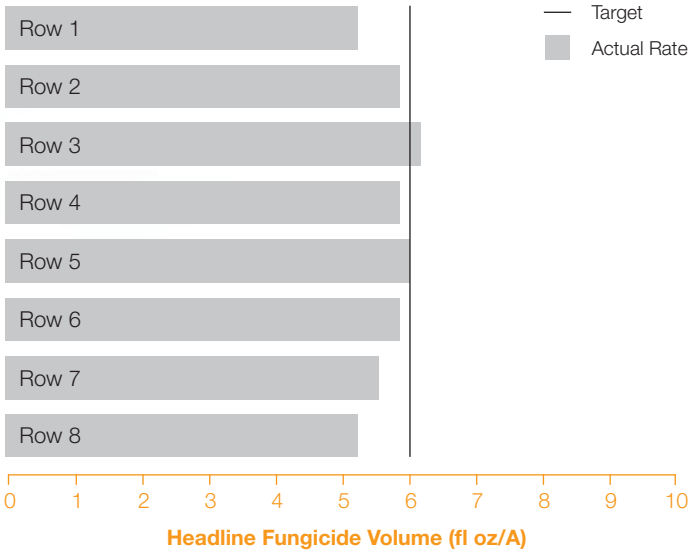
The pitchers were allowed to sit until product settled to the top, showing both received equal mixing and distribution of the product.

The Final Solution Collected from the Simulated Planter Set-Up



After an interval of six minutes, equivalent to one-half mile in planting

Accuracy Results from Simulated 8-Row Planter Set-Up: Accuracy was within +/– 7% of Target Headline Fungicide Rate (within normal application standards)



Analytical results from SGS of North America, converted to a volumetric analysis. Overall, there was an equal dispersion of liquid fertilizer carrier and Headline fungicide among 8-rows.

Xanthion™ Fungicide In-Furrow Application in Corn

Xanthion fungicide is a co-package of two liquid fungicides – one biological (an EPA registered biofungicide – Group 44) and one chemical (the same active ingredient as Headline® fungicide – Group 11). When following the Best Management Practices described, a direct injection unit can be used for an in-furrow application in corn. A minimum of 2.5 gallons per acre of water or liquid fertilizer carrier is required for in-furrow applications.

- Xanthion fungicide requires agitation to keep both components in suspension.
- It is recommended to completely empty the injection system if stopping for an extended period of time. If that is not possible, agitate until mixed prior to resuming planting.

For more information on the BASF in-furrow direct injection kit, see your local BASF representative or your local BASF authorized retailer.

For more information on BASF and the entire plant health portfolio in corn, go to: **http://www.agproducts.basf.us**

Injection Unit with Agitation

Dosatron Pump with 10 gal tank:
Part #500 DOSINJ210

Dosatron Pump with 15 gal tank:
Part #500 DOSINJ215

- Dosatron injection pump with an option of a 10 or 15 gal tank mounted on a small footprint stand which can be easily mounted on a planter.
- Factory pre-assembled fittings for quick and easy install.
- Mixing chamber for complete and accurate mix of Xanthion fungicide and fertilizer before going to the row tube.
- 3-way on/off valve to easily turn the Dosatron pump off in fields where Xanthion fungicide will not be injected.

Retro Fit Kit:
Part #500 DOSINJ-UPGRADE

- This is a retro fit kit used to modify C&R supply injection kits previously purchased for Headline fungicide. The upgrade kit simply adds an agitation pump which is necessary for the application of Xanthion fungicide.

For ordering information, call:

C&R Supply, Inc.
3610 North Cliff Ave.
Sioux Falls, SD 57104
1-800-232-2637

Xanthion™
In-Furrow Fungicide

Always read and follow label directions.
Headline is a registered trademark and Xanthion is a trademark of BASF.

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