

Teraxxa™
Seed Treatment

Teraxxa™ F4
Seed Treatment

OPEN SEASON ON WIREWORMS

NEW
FOR
2021


TERAXXA

HOW TO WIN

Others Repel. Teraxxa Seed Treatment Eliminates.

BASF

We create chemistry

The background of the advertisement is a dark, textured field of soil. In the center, the word "TERAXXA" is written in large, bold, 3D letters with a yellow-to-orange gradient. Above the letters, the text "OPEN SEASON ON WIREWORMS" is written in a white, slightly distressed font. To the left and right of the letters are several stalks of wheat. At the base of the letters, a network of red roots is visible, with a few small, brown, worm-like creatures (wireworms) crawling on the soil surface.

OPEN SEASON ON WIREWORMS

TERAXXA

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YOUR MISSION



= TERAXXA™



= NEONICOTINOID



= DIAMIDE

Farmers have seen a surge of resilient pests that lurk just beneath the surface of their crops. Wireworms expand their populations exponentially and

CAN REDUCE YIELD POTENTIAL BY AS MUCH AS

50%.¹

For years, farmers have had to rely on tools that are less than completely effective in their fight against wireworms. Tools that simply intoxicate the enemy. Giving wireworms the chance to return and even develop a resistance to neonicotinoid- and diamide-treated seeds.

Now is the time for change. It's time for farmers to regain the upper hand and take their yields back from the jaws of wireworms.

It's time for Teraxxa™ Seed Treatment.

Think you're ready for this mission?

MISSION BRIEFING

YOUR FIELD'S ENEMY

Hard, smooth and slender, wireworms can range between 1–2 inches in length when fully grown. But the enemies' small stature doesn't mean they can't deliver some major damage to your growers' yields. When they're in the larval stage, wireworms can lurk underground for up to 7 years and cut yield potential in half.¹

THE DAMAGE THEY DO

If your growers don't have the right tools in their arsenal, the fight against wireworms can be an uphill battle. Ineffective treatments fail to eliminate the enemy, and wireworms can level up into developing pesticide resistance.

Attracted by the CO₂ produced when seeds germinate, wireworms deal most of their damage early in the season when they're closer to the battlefield.

Aaron Esser, extension agronomist from Washington State University Extension, has seen these tricky foes completely eradicate yield potential.

**" I'VE SEEN WIREWORMS WHERE WE HAD "
FROM 40% TO 100% CROP LOSS.**

The pervasive pests can eat through almost anything found in your soil, and their population can grow from two adults to 200 adults and 1,000 wireworms in just three years—making it even more difficult to win the war for healthy yields.

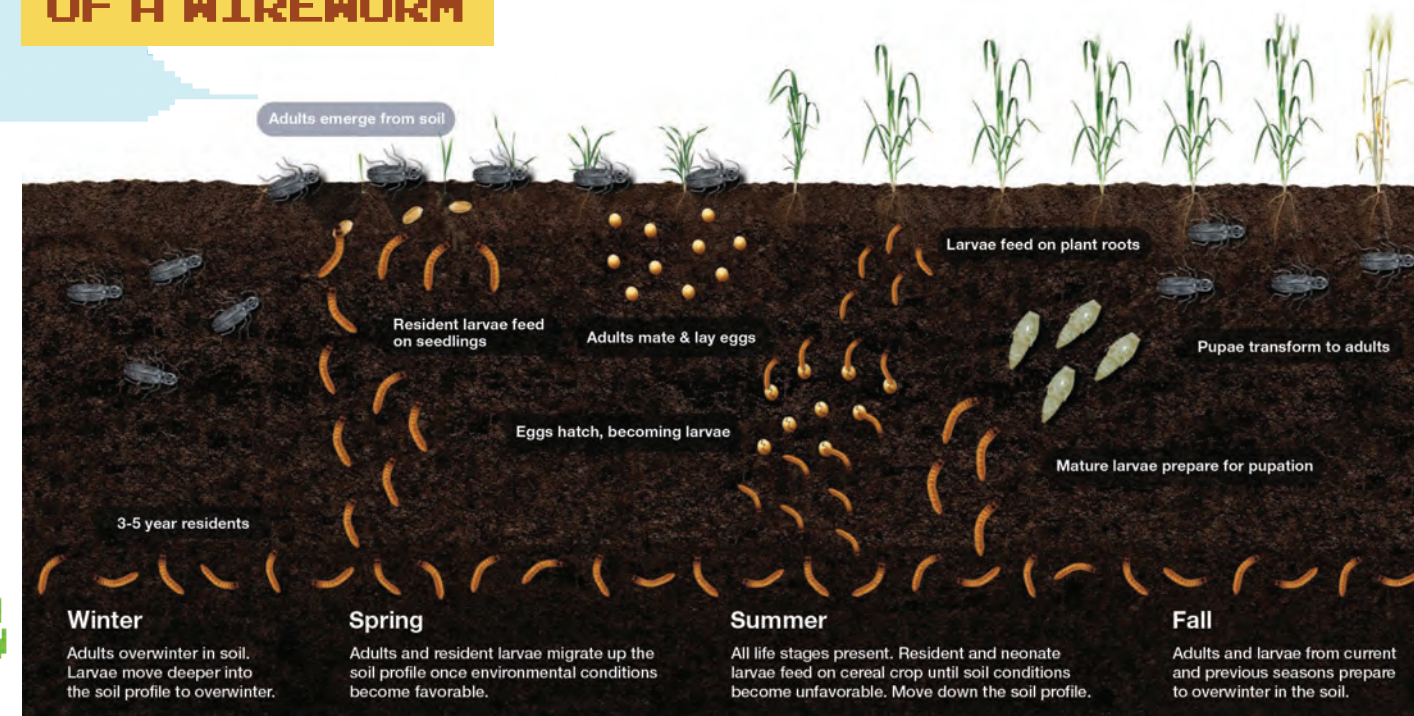
SPOTTING YOUR TARGET

Not sure if these pests have invaded a wheat field crop?
Here are some telltale signs that wireworms have already started invading your field:

- › Feeding damage on emerging leaves
- › Brown spots on roots at the base of the stem
- › Wilting or dying flag leaves
- › Patchy or bare areas in the field

It doesn't matter if it's land or irrigated soil. Wireworms thrive in both and often accumulate in the drip line of an irrigation pivot.

THE LIFE OF A WIREWORM



Source: ©BASF

ADVANCED SCOUTING TECHNIQUES

To beat your enemy, you need to know your enemy. These scouting techniques will help your growers spot the problem and give them the upper hand in their fight against wireworms.

**STEP
1** Soak corn and/or wheat seed overnight in water to speed germination.

**STEP
2** Put the soaked seed bait in an ordinary sock and bury it 6 inches deep in your field.

**STEP
3** Return in 7–14 days to see if the germinated seed has attracted wireworms.


**STEP
4** If you find wireworms, preserve them in alcohol and send them to an entomologist to determine species.

You can also sieve your soil through a screen to look for wireworms.

A pixel art landscape featuring a bright yellow sun in the upper left, dark blue mountains in the background, and a green field with several green stalks in the foreground. The sky is a gradient of blue with small white stars.

YOUR GUIDE TO TERAXXA™

SEED TREATMENT

A pixel art scene with a dark, textured ground. In the center is a large, yellow-outlined sign with a black background and white text. The background features stylized blue and white clouds, green trees, and several orange and red striped worms. Small yellow dots are scattered across the ground.

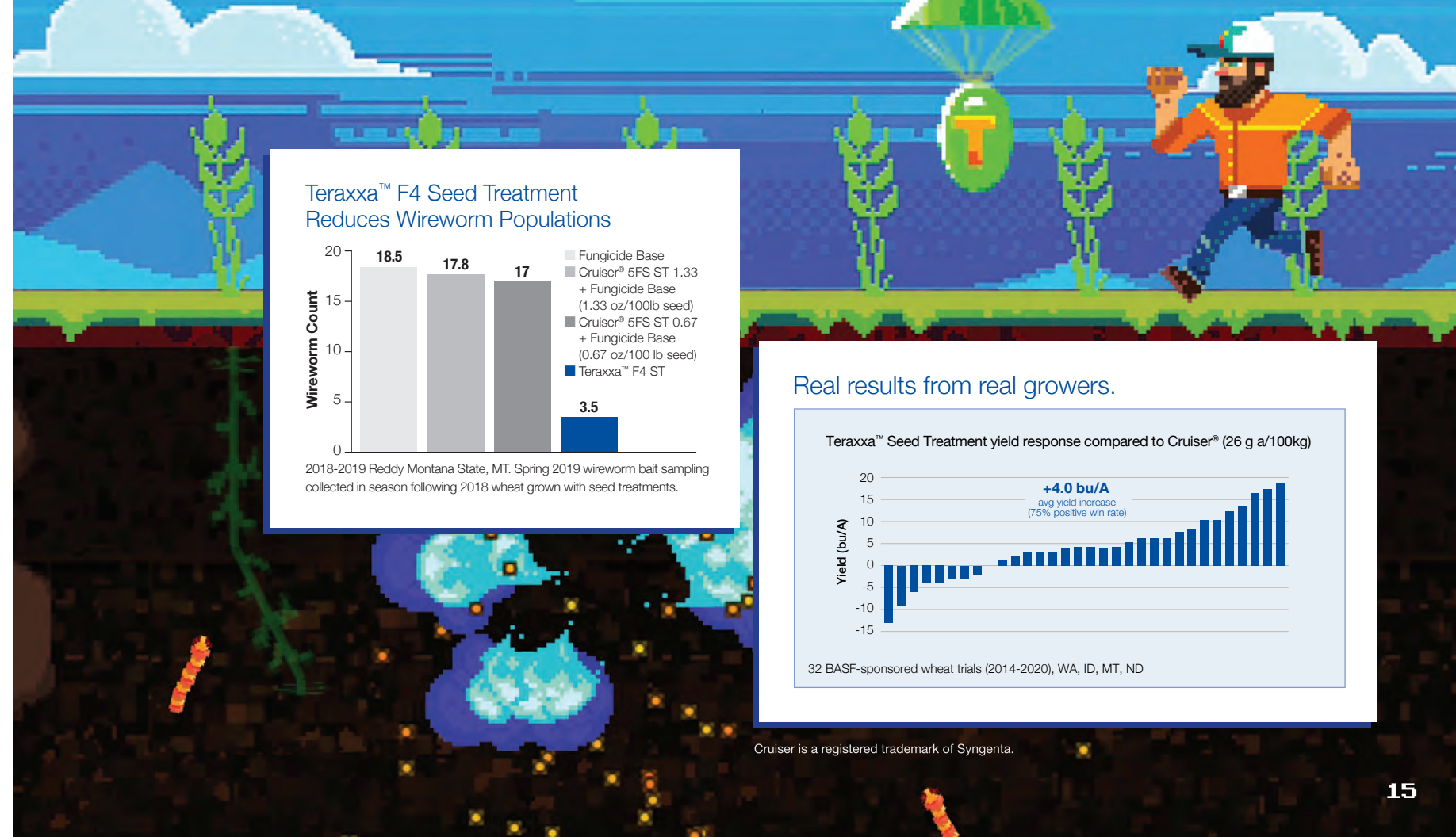
FOR WIREWORMS, IT'S
GAME OVER



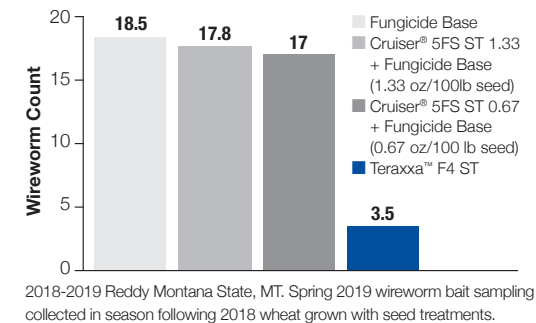
FOR YEARS, FARMERS HAVE HAD TO SETTLE . . .

... for pesticides that just intoxicate wireworms. While these treatments provided a temporary reprieve from these persistent pests, it did little to rid the field of the problem.

Teraxxa™ Seed Treatment has the only active ingredient that causes wireworm mortality, preventing it from further feeding on your seed. It can help generate a five-fold reduction in wireworms the following growing season². And with its 75% win rate against competitors³, adding Teraxxa Seed Treatment to your arsenal is a no-brainer.

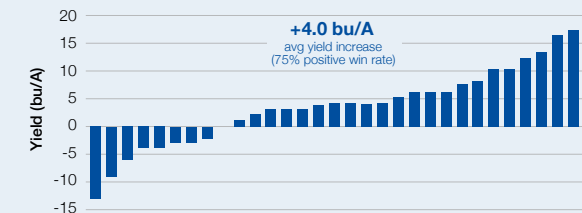


Teraxxa™ F4 Seed Treatment Reduces Wireworm Populations



Real results from real growers.

Teraxxa™ Seed Treatment yield response compared to Cruiser® (26 g a/100kg)



32 BASF-sponsored wheat trials (2014-2020), WA, ID, MT, ND

Cruiser is a registered trademark of Syngenta.



HOW IT WORKS

Teraxxa™ Seed Treatment has a new mode of action that will rapidly eliminate wireworms upon contact. It acts fast by interfering with the wireworms' nerve signal communication, causing overexcitation and incapacitation, and exploiting the weakest link in their nervous system to eliminate them for good.

This causes rapid, irreversible nerve and muscle hyperactivity, leading to convulsions, paralysis, and death.

BROFLANILIDE – THE ACTIVE INGREDIENT

The key component of Teraxxa™ Seed Treatment is Broflanilide—a powerful insecticide.

- Unique Mode of Action
- Fast Acting, Best-in-Class Control
- Low Dose Rates
- Total Knockdown

Broflanilide is the first member of the new Insecticide Resistance Action Committee (IRAC) Group 30. There is no known cross-resistance with existing modes of action currently available in the market.

NOTHING COMPARES

Existing neonicotinoid or diamide treated seeds simply can't compare to the efficacy of Teraxxa™ Seed Treatment.

THE OLD TOOLS (NEONICOTINOIDS & DIAMIDES)

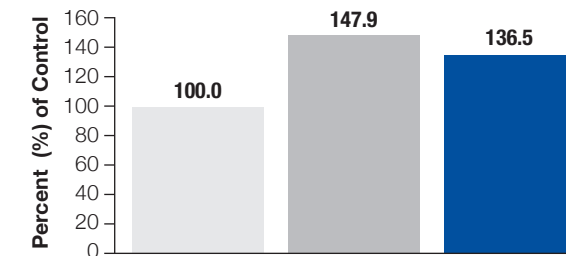
- Can't control/eliminate or reduce wireworm populations
- Intoxicate wireworms to deter them from feeding, but don't prevent recovery
- Wireworms can develop resistance to neonicotinoid insecticides and continue returning

THE NEW TOOL (TERAXXA)

- Actively eliminates wireworms
- Only active ingredient that eliminates and prevents wireworms from further feeding on seed
- Studies have shown 80%-90% reduction in resident wireworm populations between seasons⁴
- Can lead to up to a 33% increase in yield potential when used with a neonic⁵

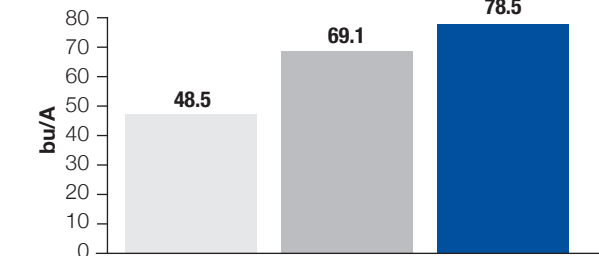
Teraxxa™ F4 Seed Treatment Redefines Performance 2020 data summary

Stand



2020 BASF-sponsored spring wheat trials (n=7).
MT, WA under wireworm pressure.

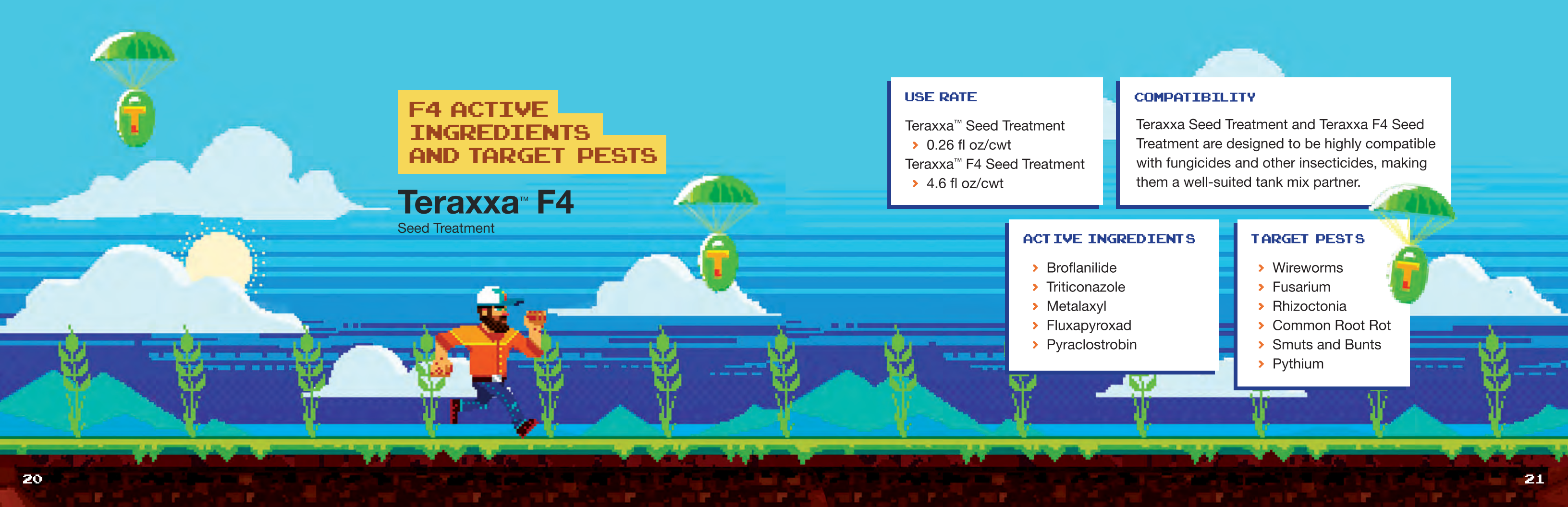
Yield



2020 BASF-sponsored spring wheat trials (n=8).
MT, WA under wireworm pressure.

Fungicide Base CruiserMaxx® Vibrance® Cereals Teraxxa™ F4 Seed Treatment

Cruiser, CruiserMaxx and Vibrance are registered trademarks of Syngenta Group Company.



F4 ACTIVE INGREDIENTS AND TARGET PESTS

Teraxxa™ F4 Seed Treatment

USE RATE

Teraxxa™ Seed Treatment

› 0.26 fl oz/cwt

Teraxxa™ F4 Seed Treatment

› 4.6 fl oz/cwt

COMPATIBILITY

Teraxxa Seed Treatment and Teraxxa F4 Seed Treatment are designed to be highly compatible with fungicides and other insecticides, making them a well-suited tank mix partner.

ACTIVE INGREDIENTS

- › Broflanilide
- › Triticonazole
- › Metalaxyl
- › Fluxapyroxad
- › Pyraclostrobin

TARGET PESTS

- › Wireworms
- › Fusarium
- › Rhizoctonia
- › Common Root Rot
- › Smuts and Bunts
- › Pythium

REFERENCES

1. Source: Agri-Facts, Alberta Government, 2014
2. 2018-2019 Reddy Montana State Study
3. Grower-applied Research Authorization Trials, 2019-2020
4. Data collected from 2-year wireworm field trials conducted by Washington State University
5. 2015-2018 U.S. field trials (WA, MT, ND, ID)





ARE YOU READY?



See how good it feels to finally eliminate wireworms. Play **TERAXXA**, the awesome arcade game that lets you experience wireworm-whacking joy right away.

◀◀PLAY NOW! Or go to Teraxxa-Wins.com

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