

# LUMIGEN® SEED TREATMENTS

## For Pioneer® Brand Corn

### PREMIUM PACKAGE

LumiGEN® seed treatments for corn protect our elite genetics from early-season disease, insects and nematodes to help maximize yield potential.

- The fungicide seed treatment is the most robust available in the industry providing enhanced protection against resistant Pythium species and a new active ingredient against Rhizoctonia (inpyrflumax).
- Lumialza® nematicide seed treatment shields roots with an expanding bio-barrier protecting corn from yield-robbing nematodes for more than 80 days while cooperating with beneficial microorganisms.

#### PROTECTION

| Diseases:         | Insects:         | Nematodes:  |
|-------------------|------------------|-------------|
| Pythium           | Wireworm         | Sting       |
| Fusarium          | White grub       | Needle      |
| Rhizoctonia       | Black cutworm    | Lance       |
| Penicillium       | Fall armyworm    | Stubby-root |
| Aspergillus       | Seed corn maggot | Root-knot   |
| Seedborne disease | Billbug          | Dagger      |
|                   | And more...      | Lesion      |

### ENHANCED CORN ROOTWORM PACKAGE

Brings the same disease and nematode protection as our Premium Package above with Lumisure® 1250 insecticide seed treatment to provide enhanced yield protection against corn rootworm.

| PROTECTION | Insects:      |                  |
|------------|---------------|------------------|
|            | Corn Rootworm | Seed corn maggot |
|            | Wireworm      | Bill bug         |
|            | White grub    | And more...      |
|            | Black cutworm |                  |

PREMIUM PACKAGE  
ENHANCED CORN ROOTWORM PACKAGE

#### FUNGICIDE SEED TREATMENT

|  |   |   |
|--|---|---|
| Lumiscend™ Pro (inpyrflumax, ethaboxam, metalaxyl) | ✓ | ✓ |
| Ipconazole   | ✓ | ✓ |
| L-2012 R biofungicide                              | ✓ | ✓ |

#### INSECTICIDE/NEMATICIDE SEED TREATMENT

|                      |   |   |
|----------------------|---|---|
| Lumivia® 250         | ✓ |   |
| Lumisure® 250        | ✓ |   |
| Lumialza® nematicide | ✓ | ✓ |
| Lumisure® 1250       |   | ✓ |

### Lumialza Advantage over FST/IST

9.0 bu/a  
YIELD ADVANTAGE<sup>1</sup>

in high nematode pressure

3.7 bu/a  
YIELD ADVANTAGE<sup>1</sup>

in low nematode pressure

- Shields against harmful nematodes while cooperating with beneficial soil organisms
- 80+ days of root growth protection



Untreated

LumiGEN® seed treatments



<sup>1</sup> Lumialza® nematicide seed treatment vs. non-nematicide seed treatment utilizing the same insecticide and fungicide recipe in seed applied technology replicated and strip trial data. Yields ranged from 3 to 9 bu/a depending on nematode species and population, in 184 low stress and 54 moderate to high stress locations.

<sup>2</sup> Data is based on 638 head-to-head comparisons between Lumisena fungicide seed treatment (0.568 fl oz/cwt) and metalaxyl (0.75 fl oz/cwt) in the top 10 soybean-producing states through Dec. 12, 2017, and subsequent replicated trials in 2018, 2019 and 2020. Comparisons were made utilizing the same soybean variety. DO NOT USE THIS OR ANY OTHER DATA FROM A LIMITED NUMBER OF TRIALS AS A SIGNIFICANT FACTOR IN PRODUCT SELECTION.

<sup>3</sup> Data is based on average of comparisons in Pioneer Agronomy Science trials from 2012-2015 at 165 locations.

<sup>4</sup> Significant yield improvement and reduction in plant stand gaps based on Corteva Agriscience research data 2018-2019, 73 locations.

<sup>5</sup> Data based on Corteva Agriscience research data 2019-2021, 82 locations.

The foregoing is provided for informational use only. Please contact your Pioneer sales professional for information and suggestions specific to your operation. Product performance is variable and depends on many factors such as moisture and heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. Individual results may vary.

Lumiderm®, Lumivia®, Lumisena® may not be registered for sale or use in all states. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. Always read and follow label directions.

The information presented here is not an offer for sale. This is not intended as a substitute for the product label for the product(s) referenced herein. The information contained in this technical document is based on the latest to-date technical information available to Corteva Agriscience, and Corteva reserves the right to update the information at any time.

Components of LumiGEN® seed treatments for soybeans are applied at a Corteva Agriscience production facility, or by an independent sales representative of Corteva Agriscience or its affiliates. Not all sales representatives offer treatment services, and costs and other charges may vary. See your sales representative for details. Seed applied technologies exclusive to Corteva Agriscience and its affiliates. Gaucho® and EverGol® are registered trademarks of Bayer. ILEVO® is a registered trademark of BASF.

# For Pioneer® Brand Soybeans

### PREMIUM PACKAGE

Our powerful combination of 6 different modes of action enhanced by Lumisena® fungicide seed treatment leads the industry in yield protection against early-season diseases.

- Lumisena offers best in class protection against the number one early-season disease in soybeans, Phytophthora.
- Multiple modes of action against Pythium, Rhizoctonia, Fusarium and Phomopsis with EverGol® Energy fungicide and L-2030 G biofungicide helps maximize yield with healthy uniform stand establishment.

| PROTECTION | Diseases:    |             |  |
|------------|--------------|-------------|--|
|            | Phytophthora | Rhizoctonia |  |
|            | Pythium      | Phomopsis   |  |
|            | Fusarium     |             |  |

### INSECTICIDE PACKAGE

Broader than "FST alone" for pest protection, including early season insects.

- Lumiderm® insecticide seed treatment reduces plant stand gaps and has 2X increase in insect control, adding cutworms, white grubs, thrips and wireworms over Gaucho® seed treatment.<sup>4</sup>
- Two modes of action with Gaucho® and Lumiderm® seed treatment combined to provide broad spectrum insect protection, early vigor and uniform stands.
- Multi-year research data shows a 1-3 bushel yield improvement by adding Lumiderm® seed treatment.<sup>5</sup>

| PROTECTION | Insects:           |            |  |
|------------|--------------------|------------|--|
|            | Bean leaf beetle   | Cutworms   |  |
|            | Early season aphid | White grub |  |
|            | Seed corn maggot   | Wireworm   |  |
|            |                    | Thrips     |  |

### OPTION TO ADD TO ANY PACKAGE

#### ADD ILEVO® HL SEED TREATMENT

Two rates of extra protection for fields at risk to soybean cyst nematode (SCN) and sudden death syndrome (SDS)

- at lower rate – protection against SCN
- at higher rate – protection against SCN and SDS

#### ILEVO® seed treatment<sup>3</sup>

SDS/SCN rate  
Heavy SDS pressure

+6.4  
bu/a

SCN rate

+1.5  
bu/a



PREMIUM PACKAGE  
INSECTICIDE PACKAGE

#### FUNGICIDE SEED TREATMENT

|   |   |  |
|---|---|--|
| Lumisena®   | ✓ |  |
| EverGol® Energy (metalaxyl, penflufen, prothioconazole) | ✓ |  |
| L-2030 G biofungicide                                   | ✓ |  |

#### INSECTICIDE SEED TREATMENT

|           |  |   |
|-----------|--|---|
| Gaucho®   |  | ✓ |
| Lumiderm® |  | ✓ |

### Lumisena Advantage over FST/IST

Best-in-class protection against Phytophthora

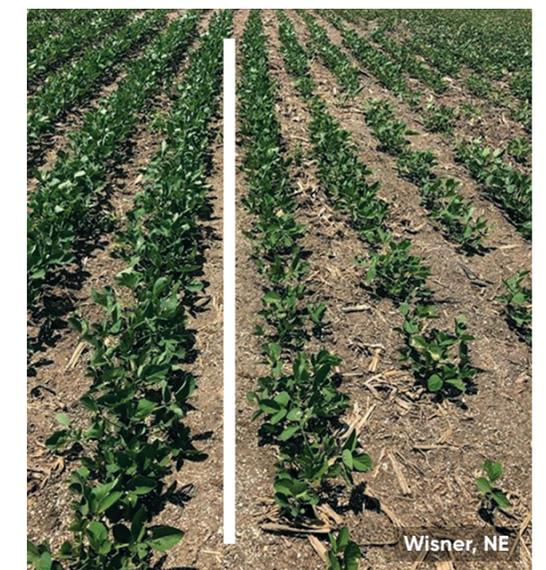
4.0 bu/a  
YIELD ADVANTAGE<sup>2</sup>

in high stress environments vs. high rate metalaxyl

1.0 bu/a  
YIELD ADVANTAGE<sup>2</sup>

benefit across the farm vs. high rate metalaxyl

### Seed Corn Maggot Pressure



Lumiderm®+ Gaucho® seed treatment

Gaucho® seed treatment

Wisner, NE