Premium Protection with XYZ

Featuring Lumisena® fungicide seed treatment

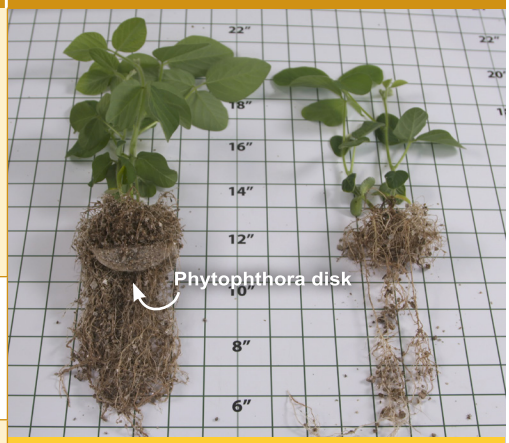
Built with **superior protection** in mind, XYZ offers multiple modes of action against yield-robbing diseases. The robust foundation of patented ingredients is designed to enhance disease and insect protection, delivering seedling protection and improved yield potential across the field.

Unmatched Disease Protection

Through a unique blend of premium seed treatments, XYZ offers unparalleled protection from the top soybean diseases in North America.

	Targeted pests	Recipe ingredients	Benefits
Fungicide Package	Phytophthora Rhizoctonia Pythium Fusarium Penicillium Seed-borne Phomopsis, Sclerotinia, Botrytis	Lumisena® fungicide seed treatment (Oxathiapiprolin) Ipconazole Metalaxyl Picoxystrobin	Lumisena fungicide demonstrated a +4.0 bu/A increase over high-rate metalaxyl in Phytophthora susceptible fields, and +1.0 bu/A across broad acres. Exceptional protection against Rhizoctonia and Fusarium diseases, delivering a one-two punch with two unique modes of action.
Insecticide Package	Bean Leaf Beetle Aphids Seed Corn Maggot	Imidacloprid	Reducing early-season leaf damage and chance of late-season bean pod mottle virus improves plant health to maximize yield potential.
Polymer		Polymer, red-colorant, stabilizer	Improves seed flow, planting accuracy & seed adherence.

Best-in-Class Protection Against Phytophthora



Roots protected by Lumisena® fungicide seed treatment drive through the diseased disk and remain healthy.[1]

Roots protected by metalaxyl die or are severely injured upon contact with diseased disk.

Increase Bu/A

Lumisena®

FUNGICIDE SEED TREATMENT

- New mode of action for **best-in-class protection against Phytophthora.**
- **Improved plant stands by more than 2,500 plants per acre** under heavy Phytophthora pressure.*

4.0 bu/A YIELD ADVANTAGE

Potential yield benefit in field areas with higher Phytophthora susceptibility using Lumisena® fungicide seed treatment.

1.0 bu/A YIELD ADVANTAGE

Potential yield benefit across the farm using Lumisena® fungicide seed treatment.

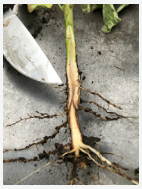
*Versus the existing industry-standard seed treatment.

Soybean Diseases

Phytophthora

- Associated with wet soil conditions
  - May occur on any soil saturated for more than 24 hours
  - Commonly occurs on heavy, poorly drained or compacted soils
- The ideal temperature for infection is 60 to 80˚F
- Multiple phases of infection can occur
  - Seed rot
  - Seedling rot, damping-off
  - Root & stem rot

Phytophthora is more likely to occur when soils are warmer, > 60˚F




Lumisena®
(Oxathiapiprolin)

Pythium

- Prefers wet, cold soil with temperatures < 60˚F
- High-residue fields and heavy or compacted soils are at higher risk
- Pathogen may attack seeds before or after germination
- Plants may be killed by “damping off” before or after emergence
- On infected plants, they hypocotyl becomes narrow and is commonly “pinched off” by the disease

Pythium is more likely to occur when soil temperatures are cooler, < 60˚F

Metalaxyl

Rhizoctonia

- Prefers moderately wet soils where germination is slow or emergence is delayed
- Prefers warmer soils > 60˚F and appears as the weather warms > 80˚F
- Infection is characterized by a shrunken, reddish-brown lesion on the hypocotyl at or near the soil line
- Infection may be superficial, causing no noticeable damage, or may girdle the stem and kill or stunt plants

Rhizoctonia is more likely to occur when soils are warmer, > 60˚F


Ipconazole & Picoxystrobin

Fusarium

- Causes light- to dark-brown lesions on soybean roots that may spread over much of the root system
- May attack the taproot and promote adventitious root growth near the soil surface, and may also degrade lateral roots, but usually does not cause seed rot

Fusarium is a complex of different species; some prefer warm and dry soils, while others prefer cool and wet soils


Ipconazole & Picoxystrobin

Proven protection against insects



XYZ includes imidacloprid to improve plant health through reduced early-season leaf damage and lowering the chance of late-season infection by protecting against:

- Bean Leaf Beetle
- Aphids
- Seed Corn Maggot

This custom blend also includes a polymer specifically designed for improved adherence to the seed coat, as well as a stabilizer for blend stability.

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[1]Data is based on 638 head-to-head comparisons between DuPont™ Lumisena® fungicide seed treatment (0.568 fl oz/cwt) and Metalaxyl (0.75 fl oz/cwt) in the top soybean-producing states through Dec. 12, 2017. Comparisons were made utilizing the same soybean variety. The foregoing is provided for informational use only. Please contact your Corteva Agriscience seed brand representative for information and suggestions specific to your operation. Product performance is variable and subject to any number of environmental, disease and pest pressures. Individual results may vary and from year to year. Product label instructions must be followed at all times.

One or more of these products may not be registered for sale or use in all states. Contact your local Corteva Agriscience retailer or representative for details and availability in your state.

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