



Croprotek® Corn Seed Overtreatment

Set the stage for a healthy growing season and maximum yield with added nutrition via seed overtreatment.

PCT | Sunrise® Croprotek® Corn Seed Overtreatment includes “early-season” nutrition and other beneficial ingredients to assist in uniform emergence, vigor and health via seed-applied treatment “on top” of a previously applied fungicide and insecticide seed treatment. Industry data suggests a three bushel per acre increase with the addition of simple nutrition.

Corn Seed Overtreatment is for seed in bulk quantities. Once “overtreatment” has been applied to the respective seed’s commercial treatment, there are NO returns, refunds or implied warranties.

Key Performance Benefits

Early season nutrition to assist in root and shoot development, uniform emergence and vigor as well as some additional fungicidal properties.

Zinc (Zn)

- ↳ Aids in the activation of enzymes, synthesis of photosynthetic pigments and chlorophyll. Zinc metabolizes the plant hormone auxin.
 - Due to enzyme activity zinc is essential in regulating functions of the cell membrane.
- ↳ In the presence of other heavy metals helps to mitigate their impact

In research trials over a **THREE-YEAR** time span, Corn Seed Overtreatment had a yield advantage vs. a check in **OHIO** of

5.2 BU/ACRE

**check: standard fungicide & insecticide seed treatment*



Manganese (Mn)

- ↳ Aids in structure of photosynthetic protein and enzymes.
- ↳ Mn is easily transported into root cells and translocated to the shoots.
- ↳ At the root rhizosphere (narrow zone of soil immediately surrounding roots) both nutrient mobilization and immobilization occurs.
 - Organic Acids released from the roots help to chelate Mn
- ↳ Contributes to lignin formation and assimilation of nitrate

Copper (Cu)

- ↳ one of eight essential plant micronutrients.
- ↳ required for many enzymatic activities in plants for chlorophyll and seed production
- ↳ offers fungicidal properties for plant protection

Iron (Fe)

- ↳ involved in synthesis of chlorophyll and in other enzymatic and metabolic processes without which plants cannot carry out their lifecycle

Plant Growth Regulators

- ↳ Encourage early plant germination and emergence
- ↳ Increase surface area of root systems
- ↳ Larger leaves and thicker stems
- ↳ Gibberellic acids control cell elongation and division in plant shoots and aids in seed germination
- ↳ Cytokinin's affect cell division, cell enlargement, senescence, and transport of amino acids in plants
- ↳ Indolebutyric Acid (IBA) stimulates root formation and development, and increases cell elongation

Seaweed Extract

- ↳ this Seaweed Extract is fortified with organic acids in combination with amino acids and a soil penetrating agent formulated to help mitigate plant stress

Chitosan

- ↳ Naturally occurring compounds that have potential with reducing plant diseases and nematodes
- ↳ Induce host defense responses in both corn and soybeans
- ↳ Exhibits a variety of antimicrobial activities

BioST + R

- ↳ BioST + R has 7 team members that provide nitrogen fixation: 6 root zone nitrogen fixers + 1 endophytic (moves nitrogen within cells throughout the plant)
- ↳ In addition to nitrogen fixing, BioST + R contains 14 microbe team members that provide ammonification (process of converting organic nitrogen into inorganic ammonia (NH₃) or ammonium ions (NH₄⁺))

Polymer

- ↳ Seals “overtreated” ingredients to the seed and assists in “flowability” for handling ease across multiple planter manufacturer platforms