3 Products to combat drought-stressed corn

The impact of drought stress varies by crop growth stage. Corn plants are typically capable of handling droughts in the early vegetative stages. However, as demand for water increases around tasseling time, so does the potential yield loss when drought occurs during this growth stage.

Jason Gibson, Market Development Specialist, Corteva Agriscience, has seen his fair share of corn leaf rolling and graying of leaf tissues due to drought stress.

"Drought stress reduces test weights, reduces yield and can result in poor-quality stalks, which leads to a difficult harvest," Gibson says. He recommends three products to help corn plants cope with stressful weather conditions.



NUTRIENT EFFICIENCY OPTIMIZER

Utrisha[™] N is a nutrient efficiency optimizer that acts as a supplemental nitrogen source. When water uptake by corn roots is limited due to drought, so is nutrient availability. Utrisha N converts nitrogen from the air for the plant to use, which reduces dependency on nitrogen uptake from the soil.



FUNGICIDE

Aproach® fungicide goes beyond disease control by improving nitrogen metabolism. Aproach increases root, shoot and chlorophyll content and lessens leaf senescence under high temperatures and drought stress.



ABIOTIC STRESS MITIGATOR

Sosdia" Stress is an abiotic stress mitigator that helps reduce yield loss associated with environmentally stressful conditions. This new biological product maximizes the conversion of water into crop biomass, increasing yield potential. Additionally, Sosdia Stress protects the plant proteins and cell membranes, preserving energy for growth instead of stress repair response.

These products can be used individually or in combinations that best serve the needs of your individual customers.

Application timing for best results

"During a drought, corn will continue to add cuticular wax to leaf surfaces to reduce water loss, which makes the leaf surface more difficult for the products mentioned above to enter the plant," Gibson says. "For this reason, it's typically more effective to apply Aproach, Utrisha N and Sosdia Stress before a period of drought stress, rather than in the middle of a stressful period."

If applications are taking place in the midst of drought conditions, it's better to make applications in the morning when plant stomata are open. This has shown to improve product uptake and final results.



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