



Helping Plants Withstand Drought Stress

(NAPSA)—America's farmers feed the world: According to the Department of Agriculture (USDA), each U.S. farmer grows enough for 155 people. Now, thanks to technology and their own hard work, they should be able to continue to do so, despite what Mother Nature has been throwing at them lately.

For example, a major problem for corn growers is drought. According to the USDA's Drought Monitor, many places display drought conditions ranging from severe to exceptional, including regions in the Western Great Plains. To help farmers across the corn-growing area, there are drought-tolerant corn plants with deep, strong root structures that can withstand drought conditions and still yield a bumper crop.

Scientific Proof

Consider this: A root comparison study of randomly selected corn seed products was conducted at the Gothenburg Water Utilization Learning Center in Nebraska. It showed that a thick, deep root structure lets corn plants reach crucial moisture locked within the subsoil, absorbing up more water and nutrients and ultimately leading to healthier ears and yield potential.

"They can produce 700 to 800 kernels per ear," said Michael Petersen, former soil scientist with the U.S. Department of Agriculture and lead agronomist with Orthman Manufacturing, a tillage and earth-moving company that participated in the root dig excavation. "And when they do that, we know that we can produce big corn."

Because more water and more



Strong roots are vital to drought and stress tolerance for corn plants.

nutrients are found between 30 and 80 inches below ground, Petersen explained, deeper roots help plants stand up to lengthy drought stress.

Rooting For Good, Strong Corn

"Deep, strong roots mean that your plants are going to be anchored to the soil very well. They are going to have a chance of rooting down and accessing the soil moisture and using that to help farmers protect their yield in a drought year," added agronomist Mark Reiman.

He said that despite moisture stress, the deep-rooted corn had healthier, more consistent ears than others. "We actually saw very nice corn ears that had no tip back," he said. "They were filled nicely, pollinated nicely, from the end of the ear to the tip of the ear. In contrast, kernel set was spotty and ear size was less consistent with the competitive brands."

The DEKALB® corn boasted a much deeper root structure, extending up to 85 inches, some beyond even the backhoe's reach. The roots maintained their form and were distributed evenly, so they could explore a much larger



Corn that gets the water it needs delivers an abundant, quality crop with higher yield potential.

soil volume with the ability to reach more moisture and nutrients.

Technological Advances

Farmers now have another tool to combat drought stress and are turning to the recently commercialized DEKALB® Genuity® DroughtGard™ Hybrids. Through the robust technology pipeline, the brand's research and development teams have delivered innovations that improve yields while using fewer inputs, including water. These plants combine drought-tolerant genetics, developed through an industry-leading breeding program, with the industry's first drought-tolerant biotech trait and agronomic practices. Combining breeding genetics with the new drought-tolerant biotech trait in DEKALB® DroughtGard™ Hybrids will mean the potential for even more powerful yield protection for farmers in 2013.

Learn More

For further facts, visit www.dekalb.com and follow the brand at www.facebook.com/dekalb.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

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