

Stress Rx[®] Ag Saves Millet Crop Under Severe Drought Stress

Severe drought conditions throughout the 2020 growing season had Tom Luhrs, a grain seed grower in Southwest Nebraska, more than concerned. In late May he told Ocean Organics all his dryland wheat was dying, while his irrigated wheat under pivot was fine.

He had just planted 160 acres of dryland Golden German Foxtail Millet* and was concerned it would suffer the same fate as the dryland wheat.

Tom sprayed the entire 160 acres with Ocean Organics **Guarantee[®] Organic** (0-0-1) seaweed extract in early June. (**Guarantee** is available in both Organic and conventional formulations.)

Guarantee has long been shown to aid stress recovery along with promoting better growth and yield.

Based on his previous use of **Guarantee**, Tom knew he could expect a 10% increase in yield. Still, he was concerned – it appeared a long season of drought was ahead. Tom asked if he should make an additional application of **Guarantee**. Instead, we suggested he apply our stress tolerance product called **Stress Rx[®] Ag** (6-0-1). This product contains seaweed extract along with nutrients and osmoprotectants that significantly increase stress tolerance, survival potential and recuperative ability from *heat, drought* and *salinity*.

* German or foxtail millet is an annual warm season grass that matures quickly in the hot summer months. It is one of the oldest cultivated crops. Although German millet has a fairly low water requirement, it doesn't recover easily after drought because of its shallow root system.



Ocean Organics shipped him a 55 gallon drum of **Stress Rx Ag**. Tom applied **Stress Rx Ag** on 80 of the 160 acres toward the end of June, using roughly 2/3rds gal per acre. (The “high” label rate is 1 gallon per acre.) Then he went through 8 weeks of drought.

Ocean Organics received this text from Tom on Sunday, Sept. 27, 2020:

“What is that drought product called? 28 bu/a untreated side, vs 35 bu/a treated. WOW! Crop is dryland Golden German Foxtail Millet. Will this help in a normal year too?”

The answer is Yes, it will boost yield and quality in a normal year too, but the significance of growing in severe drought cannot be overstated. Dryland crop is dependent on rainfall, whatever mother nature gives it. No rain means no crop.

RECAP

1. All 160 acres received a single treatment of **Guarantee** in early June. The application of **Guarantee** was at 5 leaf, 3" high.
2. Tom applied **Stress Rx Ag** to half his crop—80 acres—toward the end of June when the crop was at approximately 10-12". He used just one application of **Stress Rx** at 2/3rds gal per acre.
3. After **Stress Rx** was applied, the area then went another 8 weeks without rain.

RESULTS

- Great results with the **Stress Rx**-treated plot (80 acres)—35 bushels! As a result of spraying 2/3rds gal of **Stress Rx Ag** per acre, he got a **25% increase** in his crop.
- Tom also had very good results with the **Guarantee**-only treated acres (80 acres)—the yield was 28 bushels of millet in severe drought conditions!

A typical yield for Tom during a normal rainfall year is 50 to 75 bushels. This year, his yield is 63 bu (35 bu plus 28 bu)—an "average yield"—despite the extreme drought.

*"I'm beyond satisfied,"
Tom said. "I'm a big fan of
Guarantee, and Stress Rx
is a total game changer!"*

Tom had been worried that he would lose his entire crop to drought. **Guarantee** and **Stress Rx** saved the day with the treatments paying for themselves many times over.



LEADING SEAWEED EXTRACT FORMULATIONS

At Ocean Organics, we use proprietary and superior processing technologies to make high-performance products from fresh *Ascophyllum nodosum*. We maximize beneficial plant active compounds to produce consistent, positive results:

- Superior stress tolerance — heat, drought, salinity and disease
- Increased crop yields
- More vigorous rooting
- Improved health, appearance and color

Guarantee® and Guarantee® Organic (0-0-1)— Our flagship proprietary Seaweed Extract formulations.

Stress Rx® Ag (6-0-1) — Our multi-faceted foliar fertilizer with osmoprotectants helps alleviate physiological symptoms associated with heat, drought and salinity stresses. In a recent study, **Stress Rx** improved yield and total return per acre in strawberries under salt stress.

Ocean Organics Seaweed Extract formulations for agriculture include **Guarantee® Hi K (0-0-6)** (Organic) and **Guarantee® Complex (0.2-0-6)**.



Ocean Organics has been processing seaweed and formulating fertilizers for over 40 years. Our innovative processing technology yields products richer than others yet with fewer solids and lower viscosity. This means our extracts, with better blending, mixing and stability characteristics, can be used with a broader range of materials. Our seaweed-based fertilizers, plant health materials and soil conditioners lead the industry in quality, effectiveness, cost efficiency and environmental sustainability.



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