

Stress RxTM

Stress Management for Professional Turf Managers

Stress RxTM from Ocean Organics significantly increases your turf's heat, UV, drought and salt stress tolerance, improves its survival potential, and promotes recovery.

Stress Rx contains the most diversified combination of stress tolerance and plant strengthening constituents available. It can help intensively-maintained turf grass plants better tolerate the physiological effects of heat, drought, salinity and UV radiation.

University research (Rutgers, Virginia Tech) on Stress Rx and its ingredients shows **statistically improved turf quality** under heat, UV, drought, and salt stresses. Five years of data show:

- Improved quality, relative water content, roots, and recovery
- Less membrane leakage and leaf firing (e.g., tip necrosis)

Stress Rx contains Ocean Organics' proprietary **seaweed extract** along with the most diverse and complete



#1
**IN TURF
STRESS
TOLERANCE**

Stress RxTM

Significantly increase
your turf's stress
tolerance, survival
and recovery from:

**Heat
UV Radiation
Drought
Salt Stresses**

combination of biorational compounds available in a single foliar applied product:

- Unique **osmoprotectants**, such as exclusive glycinebetaines (the compounds that allow seaplants to adjust and survive in salt water.)
- Powerful **pigments** like xanthophyll that stabilize photosynthetic membranes and act as effective antioxidants to scavenge plant-damaging free radicals.

To further enhance stress tolerance, osmotic balance and micronutrient chelation, Stress Rx also contains Ocean Organics' unique **PRO-AMINOTM TECHNOLOGY**: 18 of 20 proteinogenic amino acids from 3 plant-derived sources.

Stress management is a proactive process. But even when your turf is already under stress, Stress Rx can help.

Continuing Research Shows Ocean Organics' Leadership in Turf Stress Management

In recent research at Rutgers, Dr. Bingru Huang conducted a study of different PGRs and biostimulants to

Today's environment is unique in that we simply can't predict what's coming next. But one thing we *can* count on is that there *will* be stress. July 2013 was the 6th hottest July in 133 years and for the past 38 months prior, global monthly temperatures exceeded their long-term averages.*

Stress Seldom Travels AloneTM When and where there is hot, there is frequently dry. In September 2013, more than half the US experienced drought conditions. Drought has been an ongoing concern across parts of the Southwest and Texas for over three years, and is likely to continue.

According to Dr. Bingru Huang, drought is one of the most common environmental stresses limiting plant growth.

To maximize your turf's survival potential through times of stress, it's essential to build the strongest possible foundation. This is true of every living system. Ocean Organics' **Stress Rx** can help your turf survive and perform under stress. It will also promote recovery and improve turf quality while building more vigorous root systems.

*Reported in *Turf Weekly*, Sept. 12, 2013 using data from National Climate Data Center



evaluate their ability to alleviate summer bentgrass decline.

The treatments that had the most significant impact were those provided by Ocean Organics' seaweed extract-based formulas, which included Stress Rx. Notable results, compared to the control and all other commercial treatments, were:

- Significantly higher turf quality
- More green leaf biomass
- Better plant density

The summer applications used a rate of 6 oz per 1,000 ft². Spring treatments also incorporated Ocean Organics' SeaBlend® granular fertilizer 12-4-5 and Guarantee® Natural for Turf.

As reported in the TriState Research Foundation Newsletter, Fall, 2013, "Ocean Organics' seaweed extract treatments clearly offered the most notable results during both the spring and summer."

Not Just Stress Management, But Building Higher Quality Turf

Heat and UV stress can create a lethal combination during tough summer conditions. Our goal is to provide products that boost stress tolerance and give superintendents added levels of protection.

Treatments with Stress Rx statistically improved root length in two combined heat/UVB stress trials at Virginia Tech. With Stress Rx treatment, roots were between 35 – 87% longer than in controls without Stress Rx. Stress Rx treatments had 54% longer roots after 8 days of recovery than controls.

Research shows Stress Rx improves turf quality, relative water content, membrane stability, and root health under stress.

Stress Rx can also be used in a program with Ocean Organics' NuRelease® or DeSal® for unbeatable results.

In a recent salinity stress field trial at UC Riverside on bermudagrass, Ocean Organics' program, which included Stress Rx and DeSal, was the **top performer in improving turf quality**. The Ocean Organics' program also decreased sodium absorption ratio (SAR) and sodium (Na) content in the soil. **Our program outperformed 20 commercial and experimental products.**

Call 800-628-GROW (4769) or 734-846-4167 today to

get started with Ocean Organics' innovative, sustainable products for unsurpassed turf quality and stress tolerance.



Ocean Organics' plot in back, control plot in front, both outlined in string – Rutgers Field Day, July 2013. Note the root core sample scars are healing more quickly in Ocean Organics' plot.

Founded in 1977, Ocean Organics is a manufacturer of high performance, sustainable, scientifically-proven marine based biostimulants, plant growth materials and granular fertilizers. Our products contain unique and proprietary constituents including state-of-the-art extracts from seaplants and other renewable natural botanical resources. Our materials have been tested in over 25 universities and independent laboratories.



Ocean Organics®

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