



TURFGRASS MANAGERS INTERESTED IN WATER CONSERVATION SHOULD STRONGLY CONSIDER USING TWCA QUALIFIED TURFGRASS VARIETIES...HERE'S WHY:

ABOUT TWCA.

Founded in 2010 by four direct competitors in the turfgrass industry, the Turfgrass Water Conservation Alliance is a 501 c(3) non profit committed to water conservation. We believe that by improving the plant materials available we can reduce the water needs of the managed environment while preserving the vital ecological services provided by greenspaces.

Our science based approach to conservation relies on the 3rd party peer review of objective data to qualify only those turfgrasses that demonstrate a statistically significant water saving potential over conventional varieties of the same species. By testing with research collaborators in thirteen locations across North America, the TWCA is eliminating confounding factors such as soil type, heat, and pest management from the results.

With 63 members worldwide representing the green collar industry, government agencies, and academia, the TWCA continues to grow and continues to emphasize the importance of a balanced, scientifically based approach to conservation and the managed environment.

The Turfgrass Water Conservation Alliance qualifies grasses that demonstrate a statistically significant water saving potential over conventional varieties of the same species. To do this we rely on a standard protocol for collecting and analyzing objective data from 14 trials with 13 research collaborators across North America. Once the data has been collected and analyzed, the results are sent to our third party peer review board of researchers from University of Arkansas and Purdue University. Our review panel ultimately makes the final qualification recommendations based solely on the evidence presented by research collaborators.

TWCA qualification requires two years of prequalification data collected from an outside source BEFORE grasses are entered into TWCA trialing to ensure the grasses have the potential of qualifying for the TWCA seal. Once entered into the TWCA trial; varieties are tested for a minimum of two years. Data for the entire trial period is considered for TWCA qualification.

Our Motto:

Improving the environment and our standard of life through water conservation

What Is It?

The TWCA is an unbiased, independent foundation who's number one goal is water conservation focusing on live plant material.

What Does It Mean?

TWCA approval means that these plants have successfully met a stringent set of criteria that have been documented and have proven water conservation benefits.

What Can TWCA Do For Me?

Utilizing proven TWCA endorsed products will not only save you time and money, using these endorsed products will help to conserve our precious resources for future generations. You can have a part in making a difference.

The overall impact of this program can be enormous.

What is the Goal of the Turfgrass Water Conservation Alliance (TWCA) Program?

The main goal of the TWCA program is to combat the rising concern of our depleting water resources. To accomplish this goal, the TWCA program is designed to recognize plants and other live goods products in the lawn and garden industry that provide a clear benefit in water conservation. Products that become TWCA qualified will have successfully met a stringent set of criteria. Therefore, consumers will be assured that any product with the TWCA qualified seal provides true water conservation benefits. The use of water to maintain residential lawns, recreational areas and landscapes, and other non-agricultural uses is often criticized and scrutinized by various governing bodies and the general public. In order to meet the growing tide of concern over non-agriculture water use, it is imperative that researchers work to introduce new plants and other live goods products into the market that can survive under reduced or limited water while still maintaining overall plant health.

Why Should I Worry About Water Conservation?

Fresh water supplies are severely limited around the world, especially in developed or developing countries, where urban sprawl, industrial growth, and agricultural modernization places greater demands on existing water supplies. It has been estimated that the demand for water has increased over three times in the past 50 years, and will continue to increase in the decades ahead. From 2000 to 2025, the pressures from population growth alone will account for a 22.43% decrease in the amount of water available per person. In addition, the weather has also taken a toll on our water resources. Our water supply and water quality continues to be jeopardized by persistent and intensifying drought and dry conditions.

The TWCA program has potential to alleviate much of the strain we are placing on our water resources, as well as lessen the negative impact to our environment. By promoting products with identifiable water-saving benefits, billions of gallons of water a year could be saved. This program will create awareness of our nation's growing water resource concern, and educate consumers in positive water conservation behaviors.

How is Turfgrass Evaluated?

The studies are conducted in approved structures that restrict natural rainfall on the plot area during the drought stress period (Figure 1). The entries are replicated four times in a randomized complete block design. Planting rates for each species reflect industry standards. Following establishment, each species is maintained appropriately and will be fertilized according to standard practices. Plots are maintained for a single growing season prior to initiating drought stress. Drought stress is replicated for two years in one location, or one year at multiple locations.

Prior to initiating drought stress, the experimental area will be saturated to eliminate any dry areas and produce uniformly wet conditions across all plots. Immediately thereafter, irrigation will be withheld to encourage drought stress symptoms. The response of entries to drought stress will be evaluated two times weekly using digital image analysis techniques (Figure 2) to quantify the percent green turf cover for each plot as drought becomes more severe (Figure 3). When all plots fall below a 25% green turf cover, the experimental area will be saturated to initiate drought recovery. Thereafter, the experimental area will be irrigated weekly and recovery of entries from drought evaluated weekly using digital image analysis until plots reached 100% green cover.

For more information visit: www.tgwca.org

STOVER SEED COMPANY IS A SUPPORTING MEMBER OF TWCA.