Super-absorbent polymers worth a look in days of rationed and expensive water

The high cost of water is enough to make any landscape manager curious about ways to conserve this valuable resource.

One way some landscapers and lawn care professionals have begun to conserve water is with water-absorbent polymers.

Water-absorbing polymers are granules buried in turf to act as tiny sponges. They soak up and retain water, dispensing it as needed to thirsty plants.

HydroGrowth Technology of Tucson, Ariz., has a new polymer on the market. The plan includes the polymer granules, injection equipment and installation techniques for maximum efficiency.

The HydroGrowth also improves soil aeration and porosity, establishes a stronger turf root zone and increases seed emergence, allowing the turf to be used weeks earlier. The HydroGrowth polymers are potassium-based. Polymer granules are inserted into the rootzone of newly planted seeds and growing plants with a patented injection process, which enables the polymers to create a “moisture wrap” effect that enhances seed germination, sprout emergence and plant growth.

Turf roots grow into moisture-swollen polymers and tap the available water and nutrients. Moisture and nutrients are ready directly, in 95 percent plant-available form.

The granules then dehydrate and absorb more moisture when it becomes available. A two-year study by the College of Agriculture at the University of Arizona compared treated turf with HydroGrowth with a control plot of untreated turf. No water was applied to any of the turf for six to eight weeks each summer. The polymer-treated turf maintained 70 to 80 percent of its original green and visual beauty after the test was concluded. The control plot retained 20 percent of its original green and was declared to be dormant. The treated plots were also green one month longer in the fall and one month earlier in the spring.

The Ritz-Carlton Hotel in Laguna Niguel, Calif., installed 43,000 sq. ft. of HydroGrowth polymers in 1989. Philip Sellick, Western Regional Director of Landscaping, says the initial cost was returned through water savings in less than one year.

“Savings during this period have averaged an impressive 39 percent,” says Sellick.

“It would have been impossible to maintain our turf and landscape areas at a cost-effective level without polymers during the drought,” adds Sellick.

“Super-absorbent polymers not only saved us water, but enabled us to reduce our fertilizer and labor costs,” says Sellick.

“We’ve seen firsthand how well they work, not only in saving us money, but in keeping our turf and plants in optimum condition.”

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