RESEARCH UPDATE

Late-season N improves turf quality all year

Research indicates a late-season nitrogen application improves turf quality year-round. This, according to Dr. John Clapp, agronomist with the Triazone Corp., speaking at the Southern Turfgrass Conference here.

"Late-season N on turf can prolong the fall/winter green-up period, increase root growth in the spring, decrease spring mowing, and improve the lawn's resistance to drought, disease, and weed pressure," Clapp says. "A dose of nitrogen in the late fall, after shoot growth has ended, helps keep the turf green until winter dormancy sets in. That eliminates the N deficiency that's so common by that time of year.

Timing—critical

"In the spring, green-up and root growth is promoted earlier, giving the turf a good start. That vigor pays off throughout the season in a stronger, denser lawn that is more resistant to insect and weed outbreaks."

"You have to be careful to time your application correctly," Clapp warned. "Apply your nitrogen after shoot growth has ended, but before the grass stops producing chlorophyll. That's usually when the temperature

Nitrogen applied too early could result in excessive topgrowth.

drops below 50°F, but before the turf turns brown."

He noted that nitrogen applied too early could result in excessive top-growth, which drains carbohydrates from the turfgrass' reserves, making them more vulnerable to winterkill. If you put on your N too late, Clapp says, the lawn will only be able to use the nutrients in the spring, after it comes

out of dormancy.

Adjust rates

"Late-season fertilization isn't designed to add N to your program," Clapp explained. "You're not changing the amount of nitrogen you apply each year—you're simply adjusting the distribution times, applying more in the fall and less in the spring."

Clapp says research indicates that 1.0 to 1.5 lbs. N/1,000 sq.ft. is a good rate for late-season application. The other application rates should be reduced to avoid over-fertilization: Clapp recommends applying 0.5 to 0.75 lb. N/1,000 sq.ft. in the spring; 0.5 to 0.75 lb. N/1,000 sq.ft. in the early summer; and 0.75 to 1.25 lbs. N/1,000 sq.ft. in the early fall.

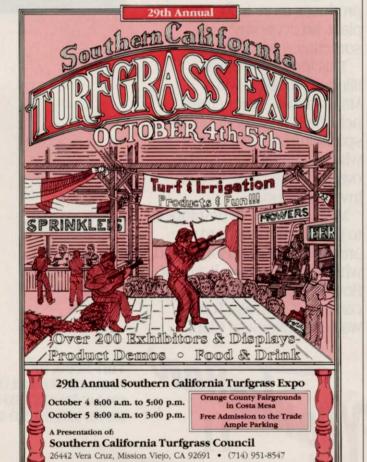
Too much late-season nitrogen causes excessive spring topgrowth and even mild cases of fusarium blight, Clapp warned, so don't exceed the recommended rates.

Controlled-release N works best for late-season application. Use a nitrogen source that doesn't rely on microbial activity, advised Clapp. He noted that using more traditional products for late-season fertilization can often lead to problems.

Urea, for example, has been found to leach out of the rootzone after lateseason applications, particularly in sandy soils. Slow-release sources like IBDU and sulfur-coated urea are less prone to leaching, but provide a delayed response, so the applicator must do some guesswork in order to apply two to three weeks before the optimum time. For best results, Clapp recommended a nitrogen source like the patented triazone molecule in N-Sure nitrogen solution. Triazone's unique ring shape allows it to begin releasing nitrogen immediately, and continue feeding turf for weeks.

"A solution like N-Sure is ideal for late-season application because it spreads its nitrogen release over a long period of time," says Clapp. "It provides immediate visual enhancement, sustains the lawn into winter, and still provides enough nitrogen to provide better spring green-up.

"That makes a difference yearround. When grass comes up in the spring with good, healthy carbohydrate reserves, the pressures of weed infestation and disease decrease dramatically," he says.



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