What Can Granular Fertilizers Do For You?

By Brian Whitlark, agronomist, West Region

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Liquid fertilizer programs are very popular. Supplying turf with small amounts of nutrients in liquid form every seven to 10 days can produce consistent growth and acceptable color. Such a program can also be easily adjusted to manage green speeds and expedite turf recovery when necessary.

Some granular fertilizers, on the other hand, can create an undesirable growth surge, leach beyond the root zone and may require immediate watering to avoid burning the turf. Organic granular fertilizers may produce unpredictable growth and often must be applied at substantial rates to yield enough nitrogen to make an impact. So, why would anyone consider using granular products?

Granular nitrogen inputs are extremely important for bolstering soil nutrient levels and creating healthy turf. Both inorganic and organic granular nitrogen sources can play an important role in fertility programs. Organic-based fertilizers not only supply nitrogen, they also increase soil carbon levels which enhances soil microbial activity and subsequent nutrient cycling. Healthy nutrient cycling catalyzes mineralization, the process by which organic nitrogen is transferred into the plant-available, inorganic form. Additionally, organic granular nitrogen sources have substantially lower leaching potential and little or no burn potential.

Several studies completed at Michigan State University demonstrated improved turf quality when liquid-based nutrient inputs were combined with granular fertilizers, especially organic sources, than when liquid-based fertilizers were used alone. A 15-year study completed at Ohio State University concluded that an organic fertility program produced greater soil microbial activity than an inorganic fertilizer program, while both programs produced equal levels of organic matter. These results suggest that including granular and liquid inputs in your fertility program could have beneficial effects. You should also consider an organic nitrogen source to provide a baseline nutrient source throughout the growing season.

For more information on the benefits of granular and organic fertilizers, please contact a USGA agronomist in your region.

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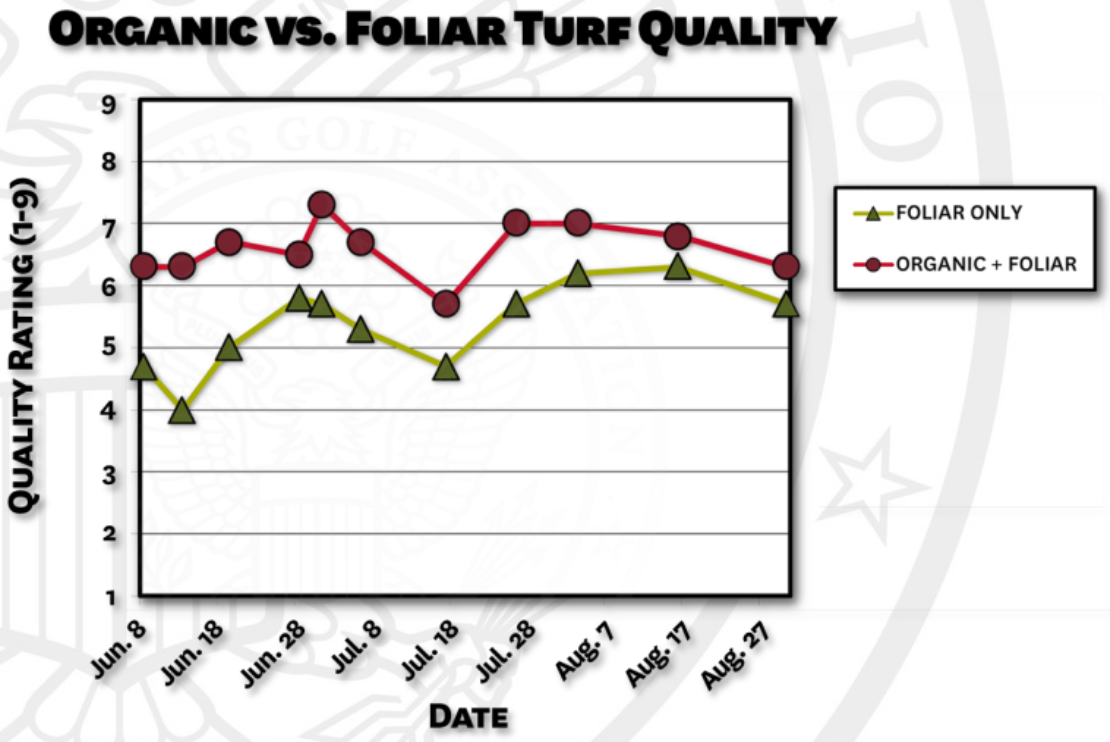

A Michigan State University study revealed fertility programs that combine granular and liquid products yield superior turf quality than liquid fertilizers alone.

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