Joann Gruttadaurio Receives NYSTAs Highest Honor

The Citation of Merit Award is given by the New York State Turfgrass Association (NYSTA) to a person in the turfgrass industry who demonstrates the following qualities: dedication to turfgrass research and education; involvement in and support of association activities; interest in promoting careers in the turfgrass industry; community involvement; and the admiration and respect of peers and colleagues. This year's recipient certainly embodies all of these qualities. NYSTA is pleased to announce the winner of the 2003 Citation of Merit Award: Joann Gruttadaurio.

Joann's long and distinguished career in the turfgrass industry made this year's decision an easy one. Joann has shown tremendous dedication to turfgrass research and education. She has been with Cornell University since 1974 and is a member of the Turfgrass Team in the Horticulture Department. She has a Bachelor's degree in Agronomy and a Master of Science degree in Extension Education from Cornell.

She is responsible for developing resources and programs for commercial horticulturists. Too, she is an instructor and serves as the Director for Cornell Cooperative Extension's education programs for professional turfgrass managers. These programs include the Cornell Turfgrass Management Short Course, which provides intensive training on best management practices for the establishment and maintenance of turf, the advanced turf Short Courses, and the Turfgrass Field Diagnostic Course.

Joann's enthusiasm for horticultural education started early in her career. In 1974, she worked with Professor Ernest Schaufler, Cornell Department of Horticulture, on developing the "Talking Plant", a model that explained the importance of plants to humans and the environment. The "Talking Plant" included a cassette, which taught students the major parts of the plant, the functions of plant parts and interesting ways to grow plants. Professor Schaufler describes his association with Joann in this way, "Joann Gruttadaurio was hired as an assistant in my State 4-H program for Floriculture and Ornamental Horticulture in 1974. She was (and is) outgoing, enthusiastic and enjoyed working with youngsters. A prototype of the "Talking Plant" was available and she took it to a nearby school, found a youngster perfect for a tape, and worked with teachers to form an accepted teaching aid. It caught on and Joann was the flower of the talking plant. Joann deserves full credit for its success."

Joann has had a very active involvement in NYSTA activities. She can always be counted on to be a moderator or speaker at the many conferences held each year. As a matter of fact, she recently partnered with Frank Rossi on two presentations. In 1996, NYSTA recognized her for her "years of dedicated service in coordinating the Cornell Turfgrass Management Short Course."

Send Us a Letter

We often receive letters from our readers reacting to the articles and information presented in CUTT. Encouraging a free-flowing, two-way communication between our readers and Cornell’s Turfgrass Team can only make CUTT a better, more relevant publication. Accordingly, we will be instituting a “Letters to the Editor” section. Send your comments via regular mail to Cornell University Turfgrass Times, 134A Plant Science Building, Cornell University, Ithaca, NY 14853, or via email to fsr3@cornell.edu.
Your Daily Nitrogen?

Turfgrass fertility is the cornerstone of efficient and effective turfgrass management programs. While there is reasonable debate regarding the amount of macro and micronutrients needed for healthy turf, there is little question regarding the importance of nitrogen (N).

The questions regarding nitrogen use typically involve growth response, source of nitrogen and environmental issues. Clearly, the use of slow release nitrogen has aided the turf manager’s ability to regulate growth as compared to high rate applications of water soluble N that produced growth surges. But what if we could supply very low amounts of N on a daily basis, as might be possible with fertigation; would there be any benefit to the plant?

Professor Dan Bowman from North Carolina State University, an expert in the area of N fertility, conducted a study with perennial ryegrass to determine the short and long term effects of daily versus periodic N applications. Potassium nitrate was supplied daily or every 8, 16 or 32 days.

As expected, the daily N applications resulted in a more stable growth habit, as measured by clippings and tissue N level, whereas the intermittent applications produced surges of growth. Interestingly, the ryegrass turf demonstrated exceptional ability to capture all but the highest N level supplied daily (0.25 lb per 1000 square feet). The intermittent N applications were equally well captured, demonstrating an ability to absorb almost 1 lb of N per 1000 square feet over a 5 day period.

This study found no difference in shoot to root ratio between plants fertilized at high rates intermittently and daily N applications. Furthermore, Bowman suggests that there is likely a lag period when N is applied in high rates and the time it takes to make it to leaf tissue. This would be further affected by frequent mowing that removes tissue and potentially lessens the influence of higher N rates.

With increased concern for nutrients and water quality, having a defensible N management strategy not based on quality, but based on efficiency, is critical. This research contributes to a growing body of physiological projects to more fully understand turf N management and how distinctly different it is from production agriculture.


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Joann has always had an interest in promoting careers in the turfgrass industry. According to friend and Cornell University associate, Nina Bassuk, Professor in the Urban Horticulture Institute, “It’s over 23 years now that Joann and I have been friends and colleagues at Cornell. I’m so pleased she is being recognized for her tireless efforts on behalf of the turfgrass industry. It is so well deserved.”

Through the words of her friends and colleagues, it is clear that Joann has made a positive impact on their lives and she has been effective at educating young people and promoting the industry through her instruction, outreach and research.

After reviewing the list of Joann’s good deeds and professional accomplishments, it’s fair to say that Joann herself leads with her heart and good sense. Her passion for what she does, desire to inform and educate, and expectation of excellence has made her an integral member of our association. She has definitely garnered the admiration and respect of her peers and colleagues.

Carl F. Gortzig, who served on the Cornell Faculty for 30 years and worked as a Cooperative Extension field staff member for nearly ten years wrote, “I don’t know many people who are as committed and conscientious in pursuit of their work in behalf of an organization!”

Finally, Greg Chorvas really sums up what many of her friends and colleagues feel about her and her selection for this award: “I got to know Joann six or seven years ago when she invited me to participate as an instructor at her week-long Cornell Short Course. I feel I am a better person and fortunate in knowing and being associated with Joann over the years. A caring and positive attitude, exceptional work ethic, knowledgeable commitment, and profes-

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loss via runoff. Much of the transport from established turfgrass is of the soluble form. Smith and Tilliston state that the formulation of 2,4-D, dicamba, and MCPP normally applied has a high average water solubility (<50 mL g⁻¹), allowing it to move rapidly through a soil profile. Toranio, et al, found pesticides had a greater potential to leach if the Kₗₙ was less than 1900 mg L⁻¹. However, rooting can affect pesticide mobility greatly. Deeply rooted turfgrass has a greater influence on subsurface water movement than shallow rooted turf. Branham, et al, state that pesticide applications to turf reduced leaching losses over bare soil.

Golf course greens have the potential to allow large pesticide losses. The sand-based rooting mix has low organic matter content, metal oxides and an open matrix which all combined to reduce the interaction of a pesticide with the soil, thereby reducing potential attenuation and binding. The coarse, sandy soil allows for rapid water movement and little potential attenuation because of a low cation exchange capacity. Over-application of water will cause pesticides to be transported through the soil to ground water. Greens are generally watered heavily which increases leaching. However, pesticide movement with the water can be greatly reduced by thatch which binds and degrades large quantities of pesticides. Runoff is usually negligible on sand-based golf greens. Concentrations of a compound may be high in runoff, but mass losses are low. They observed 2,4-D concentrations as high as 314 µg L⁻¹, but runoff depth was minimal.

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Editors Note: Zach is currently pursuing his Ph.D. with Professor Marty Petrovic investigating landscape, watershed and water quality issues. This is the first of a three part series on the current status of water quality research as it relates to turfgrass management.

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