GROWTH PRODUCTS

NEWS AS IT HAPPENS 2004

Turf Volume 6, Issue 2 March /April

What's Up With "True Foliar" These Days?

Some time back in the 18th century a Dutch scientist ran a simple experiment. He potted a tree. First weighed the tree and soil. He sealed the container so that only water (distilled) could be added to the pot. The tree grew, and at the end of the experiment took the final weight of the soil and the tree. There was no measurable difference in the soil weight but the tree more than doubled in weight. So where did the tree get its nourishment from? "The air via the leaf tissue".

To bring us up to the 21st century, it is well known and documented that the most efficient method of nitrogen fertilization is with liquid slow release nitrogen products (SRN).

Currently three are on the market, one of which is Nitro-30 (30-0-0) manufactured and marketed by Growth Products. **Nitro-30 is a methylene urea nitrogen**, and a base component in all N-P-K fertilizers manufactured by Growth Products, including our very popular 18-3-6 with 50% SRN.

Nitro-30 has some unique and important properties that make a significant difference in fertility. They include:

- A highly ***tacky/ sticky*** trait that will stick to the leaf tissue and/or the soil particles. It will not be washed away, even in heavy rainfall, or frequent irrigation.
- Ability to ***fasten to the leaf cuticle***. Nitro-30 will be reserved in the leaf cuticle, break down slowly, through UV radiation, and absorbed by stomatal openings.
- ***Dual Efficiency*** – Nitro-30 is effectively utilized by either the leaf (foliar absorption) or root of the plant.
- Nitro-30 will ***not leach or volatilize*** thanks to its unique properties. Between irrigation, high spray tank rates, and Mother Nature, most fertilizers (granular or liquid) without SRN are washed away before they even have a chance to be absorbed foliarly.

Some more facts! The citrus industry extensively uses **several million gallons** of liquid slow release nitrogen fertilizer each year as a foliar spray. The grape industry in the US and Europe does the same. A study sponsored by the German government proved that foliar applied Nitro-30 SRN provided better nitrogen leaf tissue absorption and higher grape yield. Studies at the University of Florida documented the same results from foliar applied SRN on citrus.

Back to the turf industry, studies in the early 80's at leading Turf Universities such as Ohio State University, Michigan State and Purdue, also documented the same facts; that a slow release nitrogen source provided excellent agronomic response, no phytoxicity and provided a better residual nitrogen release then liquid fertilizers with quick release nitrogen sources, such as urea, ammonia and nitrates.

The superior qualities on Slow Release Nitrogen, and its ability to be utilized as a "True Foliar" has been around for over 20 years.

The chemistry of Nitro-30 also provides additional benefits, including:

1) ***They do not contain nitrates!*** Nitrates are now the hot topic in ground water contamination. Growth Products fertilizers are much better for the environment.

2) The new grass types are big thatch producers (A4, A3). Quick release nitrogen products, made with a majority of urea, just add to the problem. ***A slow release nitrogen fertilizer can help reduce the thatch build up.***

Want to subscribe to the Growth Products News As It Happens? Visit us on the World Wide web at www.growthproducts.com, and register under the Help Desk.

Winged Foot Golf Club, Mamaroneck, NY
Used Nitro+K 22-0-16 with 82% SRN on fairways, and Nitro-30 (30-0-0) SRN on the ruffs.

Growth Products, Ltd. • P.O. Box 1252 • White Plains, NY 10602
Toll Free: (800) 648-7626 • Fax: (914) 428-2780 • info@growthproducts.com • www.GrowthProducts.com