## NOTES FROM SCOTTS SEMINAR

What is the role of Golf Course Superintendent? Basically, according to the opinion expressed by the seminar spokesman, the turf superintendent is mainly interested in providing fine playing conditions and turf

I. Nitrogen, Potassium, and Phosphorous sources affect plant growth.

A. Role of Nitrogen in Plant Growth.

1. It is part of the chlorophyll molecule

2. Necessary element in the photosynthetic

3. Promotes vegetative growth

- 4. Effects the competitiveness of turf
- B. How much Nitrogen does one use?

Depends on turf species

2. Existing or desired soil characteristics

- 3. Level of effort and its intensity directed toward maintenance of the desired turf i.e., sandy soils will probably require more N2. Too little N2 might encourage more dollarspot activity
- C. Nitrogen Fertilization: the following factors should be considered when selecting a particular product and fertilizer ratio:

1. The growth rate of the species

2. Solubility of the fertilizer (release characteristics of fertilizer indirectly affects all other factors involved in balanced turf nutrition)

Greening response of the turf species

D. The growth rate of a turf species is a key factor in fertilizer selection and ultimately an important ingredient of turf management. Therefore, in selecting fertilizer:

1. There is a tendency now to select controlled

release products.

2. Human and mechanical labor plus efficiency in the product in achieving the desired response from the plant must be considered.

E. Fertilizer, nitrogen sources:

1. Ammonium sulfate: quick-release nitrogen, good growth response & color for about 4-5 weeks. Definite decline in performance by the eighth week.

2. Urea formaldehyde: (Ureaform), 66% intermediate to long term release material. Color response peaks in the 12th week from the

initial application.

3. IBDU: contains little quick release No. 90% of the material is intermediate to long-term release. It peaks during weeks 6-12 from the initial application.

4. Methylene: 62% of this material is N2: Provides initial and short-term response to color and growth throughout 15 week application.

\*One can come into problems with physically mixing N2 source materials (fertilizers).

F. Characteristics involved in fertilizer selection:

Spoon-feeding vs. Controlled release

- 2. Solubility of N2 sources determines release
- 3. Greening response is big factor with fertilizer

4. Clipping and mowing frequency

5. Salt Index and burn potential \*Percent of N2 does not tell safety of material rather it tells you the source of the Nitrogen. (IBDU performed well during the summer months.)

#### II. Phosphorus influence to plant growth

A. Involved in the photosnythetic process

B. Necessary to build healthy tissue

- C. Insures a healthy root system, development of new seedlings
- D. Physiological functions:

1. ATP

- 2. New cell production
- E. Phosphorus fertilization:

1. Solubility

2. Slightly acid soil pH desired

3. Supplemental feeding at seeding time

F. Phosphorus Source:

(Monoammonium phosphate is best 11-48-0) MAR

- 1. Ammonium stimulates the uptake of phosphorous
- 2. MAP is completely water soluble (and therefore available) compared to other sources

### III. Role of Potassium in Plant Growth

A. Aids in the development of chlorophyll

Credit - Tee to Green

# By the Sweat of Thy Brow

"I am the foundation of all prosperity. I am the fount from which all blessings flow. Everything that is of value in this world springs from me. I am the salt that

gives life its savor.
"I am the sole support of the poor, and the rich who think they can do without me live futile lives and fill

premature graves.
"I have built America. I have built her matchless industries, laid her incomparable railroads, created her cities, and reared her skyscrapers.

"I am the friend of every worthy youth. If he makes my acquaintance when he is young and keeps me by his side throughout his life, I can do more for him than the richest parent.

"I keep bodies lean and fit, minds alert, and when I am neglected, both bodies and minds grow fat and

sluggish. I am even the parent of genius itself.

"I am represented in every paper that flies from the press, in every loaf of bread that springs from the oven, in every train that crosses the continent, and in every ship that steams the ocean.

"Fools hate me, wise men love me. The man who keeps his hand in mine throughout his life never dies because that which he has created with my help lives on after he is gone. The man who shirks me and scorns my aid never lives - never really lives, even though he may continue to breathe.

"Who am I? What am I? I am WORK!"

Author Unknown

#### MIDWEST LAWN CARE PROFESSIONALS TO MEET JULY 21

The Midwest Professional Lawn Care Regional Seminar will be held at the Elmhurst Country Club, Wooddale, Illinois on July 21, 1982.

The clinic is co-sponsored by the University of Illinois Extension Service and the Professional Lawn Care Association of America.

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