

# Is Coated Seed Worth It?

## *An Evaluation of Coated Bentgrass and Ryegrass Seed*

**T**urfgrass managers have always looked for ways of hastening seed germination. Methods now used in the industry include pregermination of seed and seed priming. In recent years, a process of coating seed with fertilizer and fungicide was developed with improved stand establishment in mind. Nutri-Kote plus Apron® is a process that coats seed with 50% fertilizer and fungicide (metalaxyl) by weight.

Research conducted at Cornell compared Nutri-Kote treated perennial ryegrass and creeping bentgrass seed to untreated seed. The trials were planted as spring (May 25), summer (July 5), and fall (September 10) seedings at normal recommended rates. Nutri-Kote treated seed was also seeded at half rate. This treatment was included to see if a half rate of seed was sufficient to establish an acceptable turfgrass stand. The cost of Nutri-Kote treated seed is about twice that of untreated seed. Scotts Starter Fertilizer (18-24-3) was applied in conjunction with treated and untreated seed.

### Perennial Ryegrass

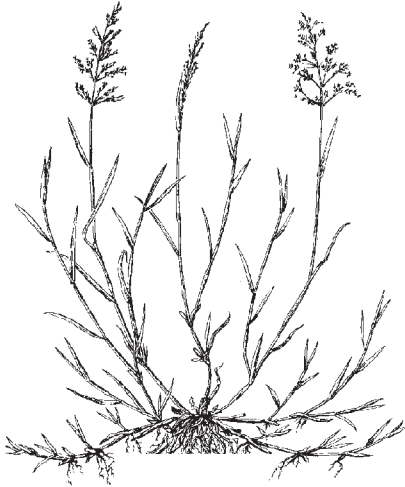
Nutri-Kote treated perennial ryegrass seed had slightly greater seedling vigor than untreated seed in the summer seeding, and only at the higher seeding rate.

We found had half the number of plants present when we seeded at half rate. The half rate of Nutri-Kote treated perennial ryegrass seed, while having an economic advantage, is not an acceptable option.

The best turf was grown where we used starter fertilizer in the seedbed, regardless of seed coating. Coated seed is not an adequate substitute for a starter fertilizer in the seedbed. If you do not use fertilizer in a seedbed, however, a full rate of coated seed is better than untreated seed alone.

### Creeping Bentgrass

The seedling vigor of creeping bentgrass was greatest where a starter fertilizer was used in the seedbed. Nutri-Kote treated bentgrass seeded at the full rate was better than seed alone in the



spring seeding, but seemed to reduce vigor in the summer seeding. Studies in North Carolina also had reduced establishment of bentgrass that was coated.

The half rate of treated seed usually produced thinner stands. Like the perennial ryegrass studies, these results demonstrated that coating seed is not an acceptable substitute for seedbed fertilization. The fact is, seedbed fertilization masked any benefits from seed coating. Also, you must seed bentgrass at the full "seeding rate" to produce an acceptable quality turf.

### What are the Benefits?

After looking at these results, one might ask "What are the benefits of using coated seed?". If the situation should arise where it would be impossible to apply fertilizer in the seedbed, coated seed should result in better stand establishment than uncoated seed. However, since you will have to seed at a full rate, your seed costs will be double that of uncoated seed. Seed Nutri-Kote treated seed at 10 lb and 2 lb seed per 1000 square for perennial ryegrass and creeping bentgrass, respectively.

Seed coating would be beneficial for extending a limited seed supply. When bentgrass seed was in short supply, some seed distributors coated a portion of their seed to stretch the amount that they had available to sell.

While coating seed with fertilizer and fungicide may seem to make good sense, our studies failed to find many benefits to coating seed.

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