Rutgers Corner -

Seed and Fertilizer: How much was applied?

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Having been given the opportunity to travel throughout the Garden State and visit numerous sports fields over the last several years, this author has often encountered sports field managers who are either unaware of how much seed/fertilizer they are applying on a 1000 sq ft basis or believe they are applying a particular amount but in actuality are only applying a fraction.

The responsibility of fertilizer and seed applications are often left to a contractor. When asked how much seed/fertilizer was actually applied to a sports field, more often than not, the sports field manager is either unaware of the amount or he or she presents a scope of work developed the contractor with no certainty as to what rates were actually made, let alone, whether any application was made at all.

One way of sifting though all of this confusion is to simply know how much area requires treatment and the number of bags of specific material required to treat that area. Using seed as an example, a typical overseeding recommendation for perennial ryegrass is 6.0 lbs seed per 1000 sq ft. To seed the area between the hash marks on a high school football field (approximately 16200 sq ft) at this rate, approximately 97 lbs of seed are required ([6.0 lbs x 16200 sq ft] / 1000 sq ft = 97.2 lbs). Seed is typically sod in 50.0-lb bags; therefore two (2) 50.0-lb bags of seed are required for order to complete this overseeding operation.

Applied fertilizer amounts can be calculated in a similar manner. Assume 0.75 lbs nitrogen (N) per 1000 sq ft specified to be applied to an entire football field and the material to be used has an analysis of 35-0-0. This fertilizer contains 35% N; 0% phosphate (P_2O_5); and 0% potash (K_2O). A football field (including endzones) is 57600 sq ft. To apply 0.75 lb N per 1000 sq ft using a material that contains 35% N, 2.1 lbs of this fertilizer must be applied per 1000 sq ft (0.75 lbs N / 0.35 lbs N per 1.0 lb fertilizer = 2.1 lbs fertilizer). To treat the football field at the desired rate, 121 lbs of the 35-0-0 fertilizer must be applied to the field ([2.1 lbs x 57600 sq ft]/1000 sq ft = 123 lbs). Fertilizer is typically sold in 50.0-lb bags; hence, 3 (three) 50.0-lb bags will be required for order and approximately two-and-one-half (2.5) bags will be required to treat the field at the 0.75 lbs N per 1000 sq ft rate.

One way of exercising oversight on contracted work is to request to see the number of fertilizer and/or seed bags used to treat a sports field. Knowing the specified application rate, the area to receive the application, and, in the case of fertilizer, either the specified analysis or the analysis utilized by the contractor, one can calculate the amount of material required.

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DID YOU KNOW?

There are 566 municipalities in New Jersey - all of which are members of the New Jersey State League of Municipalities