

NEW SEED COATING GIVES GRASS GROWTH A BOOST

Advances in turf grass breeding over the last thirty years have answered many of the problems turf managers experience.

Disease resistance, drought tolerance, density and recovery are some of the long list of characteristics that have been improved through breeding of new varieties.

Problems still remain however once sowing has taken place as to whether the seed will germinate and establish to maturity. Weather conditions, physical or botanical conditions are all factors that can affect the established plant. Any way of assisting the germinated grass seed to establish quickly and provide a healthy, dense sward can only be of benefit to today's groundsman.

Rigby Taylor, a major supplier to the amenity market, recognised the small time window for completing renovation work or to prepare a new sward and the need for rapid re-establishment of turf grass surfaces. Consequently they investigated the possibilities of overcoming such limitations. Backed up by three years of dedicated research involving Rigby Taylor's seed breeding partner Top Green, a new seed coating has been developed and is now available to the turf manager.

This special ESP (Enhanced Seed Performance) seed coating is a liquid seed coating and is sprayed directly and uniformly onto the grass seed prior to packing. Being a liquid rather than a powder ensures each individual seed within the bag is equally and evenly coated. It also means that the weight of the bag is not affected, nor the number of seeds in the bag and there are no Health & Safety issues either in the packaging process or during handling by the turf manager on site.

A specially designed formulation of key plant health components that are beneficial to the development of grass seedlings is present in the ESP liquid coating and include:

Enhanced Root Developer: A special synergistic complex that improves root mass and length, increases auxin biosynthesis, encourages nutrient uptake and stimulates chlorophyll content.



Mixture R117 Untreated.



Mixture R117 ESP treated.

Humic Acids: Stimulates plant enzymes and activity of soil micro-organisms. Promotes root respiration and the coating allows humic acids to be more readily absorbed by the seed through the pores.

Growth Promoting Hormones: These betaines, cytokinins and gibberellins help improve seed germination and establishment. These hormones combined with the simple plant sugars improve seed germination and establishment.

Amino-acids: Amino acids are the structural building blocks that make up proteins and are a vital part of all the plant's physiological processes. Their presence in the coating improves the stress resistance of the seedlings to a range of conditions such as drought and cold. Their chelating properties enable nutrients to be more readily absorbed by leaves and shoots.

Micro-Nutrients: Essential for plant growth but are only required in very small quantities. The ESP coating contains many of these trace elements, all in a chelated form to ensure maximum plant uptake.

Although the research showed that ESP treated seed can germinate about 2 days earlier than untreated seed, the major benefits are more alongside the improved levels of establishment and overall health of the germinated turf plant. Results have shown an improved early

establishment with a 20% increase in root mass.

There are also a greater number of root hairs produced so not only reinforcing the foundation of the turf and increasing its strength and ability but also improving the plant's ability to capture and utilise water and nutrients. The sward density and ground cover is also enhanced so reducing the time from renovation to use. Leaf colour, thickness and overall plant health are also increased.

Tried and tested at Twickenham

At the famous Twickenham Stadium, Head Groundsman Keith Kent uses ESP treated Mascot R14 grass seed mixture to produce an even, dense sward. Seeding throughout the playing season, when weather permits, major remedial work is undertaken in June. Keith says: "I was late seeding in 2009 as we re-drained the pitch. We did not seed until the 20th June but the take-up of grass seed with ESP R14 was absolutely amazing. This meant we were playing in August with good coverage and stability which is fantastic."

Several mixtures are already benefiting from the ESP coating technology, and Rigby Taylor plans to extend the number of mixtures in their Mascot range available with this treatment. **FSA**

For more information call Freephone 0800 424919 or visit www.rigbytaylor.com



Mixture R311 Untreated - Soil particles clumped together with little attachment of the plant or soil.



Mixture R311 ESP treated - Many roots produced with soil particles consistently attached along their length.