

THE SLOPEMASTER® ADVANTAGE

NEWS AND INFORMATION ON SLOPEMASTER® PROFESSIONAL EROSION CONTROL MIXTURE

Pennington's Slopemaster®

WHERE TO PLANT

> Primary adaptation Adapted to some sites

Offers Permanent Vegetative Solutions For Professional Erosion Control

Engineers, architects and other erosion & sediment control professionals needing a highly effective, easy-to-use, sustainable and low maintenance erosion control solution will want to strongly consider Pennington's SLOPEMASTER® professional erosion control seed mixture. This one-of-a-kind mix is exclusively designed to provide permanent and sustainable vegetative erosion solutions for slopes on construction sites, retention ponds, pipelines, powerline right-of-ways and roadsides. SLOPEMASTER® mixtures are a blend of premium seed varieties specifically chosen for erosion control where soil conditions and fertility are poor and rapid establishment is necessary with little or no follow-up maintenance. Unlike many cheap temporary grass mixes that perform well initially and then fade away, SLOPEMASTER® mixes offer attractive, permanent vegetative cover that holds soil in place year after year.



Annual grasses such as ryegrass and millet alone work well as rapidly established, temporary erosion control solutions, but cannot be depended upon for long-term soil stabilization as illustrated above.

SLOPEMASTER® mixes are custom blended by region to offer only the most durable and adaptable legumes & grasses for the various climatic areas of the U.S. Each blend features Durana white clover — the most persistent and versatile clover available in the marketplace today.



SLOPEMASTER® mixes contain the proper combination of annual and perennial vegetation for rapid establishment and long lasting erosion control.

With as many as 97 stolons per sq. ft., Durana forms a thick, water penetrable mat that holds highly erodable soils in place. As a legume, Durana improves soil structure and "manufactures" up to 150 lbs per acre of nitrogen annually which it shares with companion plants such as tall fescue, bahia and bermuda. It is a perennial plant that regrows both from live stolons and from volunteer reseeding. The result is a long lasting, sustainable and eye pleasing naturalized area that requires minimal maintenance.

SLOPEMASTER[®] seeds are treated with Pennington's exclusive SeedFuel[™] seed coating and MYCO Advantage[®] technology for faster germination, greater seedling vigor and enhanced root development. Extensive research has shown plants from seed treated with the MYCO Advantage[®] technology have significantly larger root mass resulting in greater drought tolerance and nutrient absorption capability — a critical concern on many erodable sites.

 ${\tt SLOPEMASTER}^{\circledast}$ mixes come packaged in applicator-friendly 25 lb. bags that help eliminate water damage, seed loss and mixing errors.



Contractors Required To Be Good Environmental Stewards

During the past decade, water and air quality issues have been at the forefront of public interest. In response, Congress and environmental regulatory agencies have implemented numerous rules and regulations to address these critical issues. Several areas have been targeted, but perhaps none more so than the construction industry.

EPA's National Pollutant Discharge Elimination System (NPDES) now requires more stringent permitting requirements as well as more extensive erosion and



sediment control measures. Contractors are finding that erosion and sediment control can no longer be mere afterthoughts; but now are very much an integral component of the overall project design. With NPDES, contractors must consider all soil leaving the site whether it be mud on tires, sediment washing into a stream or clouds of dust

Contractors are finding the least costly approach to long-term soil stabilization is one where the job is done correctly and done only once.

swirling or blowing offsite. Of equal importance is consideration for final and permanent soil stabilization for the area once the project is completed. In most instances, this involves establishment of permanent vegetation on the site.

Cheap not always the most profitable

As with other facets of construction, the least costly approach to long-term soil

stabilization is one where the job is done correctly and done only once. This may result in slightly higher upfront costs, but long-term, would be considerably cheaper and more effective.

When choosing vegetative solutions, knowledgeable contractors use seed mixes containing legumes and grasses that are long lasting, sustainable and well adapted to the challenging conditions often seen on disturbed soil sites. The more "green conscious" contractor also chooses vegetative mixes that are aesthetically pleasing to the eye and enhance the natural living environment.

Annual grasses such as ryegrass and millet work well as a rapidly established. temporary erosion control solution, but cannot be depended upon for long-term soil stabilization. For this reason, erosion control seed mixes that contain the proper proportion of annual and perennial grasses and legumes work best. The initial



The construction industry is facing stricter permitting requirements as well as more extensive erosion and sediment control measures on job sites.

higher cost of such products is easily offset with less complaints and fewer return trips to redo or repair non-compliant areas.

MYCO Advantage[®] Technology by the makers of Slopemaster[®] products Replenishes Key Soil Microbes On Eroded Sites

Plants are highly dependent upon good soil for optimum growth and health. For most, this simply means maintaining the proper soil pH and nutrient content. However, the term "good soil" involves many other key elements including organic matter content, water permeability and compaction. But, perhaps even more important than these are soil microorganisms. Soil scientists have long



known that a healthy soil environment includes millions of tiny soil microbes that serve numerous functions to enhance plant growth and development. Without these micro-organisms, soils can become unproductive regardless of their fertility status. Soil micro-organisms can become depleted or even destroyed with

32 Days after standard NPK fertilizer application

32 Days after one application of Bio-D SP

major soil disturbance as often seen on construction areas, building sites and roadsides. As a solution to this critical problem, Pennington now offers a number of seed products with MYCO Advantage® technology including the ultra-popular SLOPEMASTER® professional erosion control product.

MYCO Advantage® technology is a unique seed coating that reintroduces beneficial and naturally occurring micro-organisms into the soil. These micro-organisms include hundreds of strains of beneficial gram positive and negative bacteria plus mycorrhizal fungi. It also contains humic substances and amino acid complexes that will aid in restoring organic matter to the soil. The soil is the foundation of plant life and the MYCO Advantage[®] treatment is uniquely formulated to improve soil health through replenishment of the beneficial micro-organisms. The bacteria component will play an important role in nutrient release, organic matter composition, and soil development. They also

help to form compounds that aid in micro-aggregation of particles creating pore space for air and water infiltration. The mycorrhizal fungi form symbiotic relationships with the new plants providing them with nutrients, added water and some pathogen



Essential soil micro-organisms can become depleted or even destroyed with major soil disturbance often seen on construction areas, building sites and roadsides. MYCO Advantage® technology by the makers of Slopemaster® products helps replenish soil microbes resulting in healthier, more vigorous plants.

protection in exchange for a carbon source. Humic substances act as chelators and facilitate easier uptake of nutrients.

This unique MYCO Advantage[®] treatment is an important step in restoring soil health. The seed "carrier" provides the transport and application to the soil surface or into a hydro-seeding tank. The micro-organisms will come out of dormancy when water is applied, and the bacterial component will begin to replicate logarithmically in short periods of time starting the path to improved soil health.



The Unique Packaging of Slopemaster[®] Products Reduces Waste and Application Errors



Responding to contractor requests for a low input and more sustainable vegetative solution for erosion control, Pennington developed SLOPEMASTER® Erosion Control Mixture. SLOPEMASTER® mixes are quickly becoming an industry favorite. Its popularity is not just based on its outstanding vegetation seed mix, but also on its applicator-friendly packaging. With extensive knowledge and experience in the professional erosion control industry, Pennington experts kept contractor interests at the forefront when developing the SLOPEMASTER® product with state-of-the-art packaging designed to reduce waste and potential application errors.

SLOPEMASTER® mixes are packaged in specially designed bags that help eliminate water damage, seed loss from torn bags and potential mixing errors. The bag features a paper covered poly-weave fabric designed for maximum strength and toughness as well as minimal small seed leakage. Additionally, each bag is coated with a poly-laminate that sheds water keeping the seed fresh and dry. With this packaging, there's less worry about torn bags, splashing water or sudden rain showers. Further enhancing the user-friendly concept, SLOPEMASTER[®] mixes are packaged in 25 lb. bags for ease of handling and mixing. When using it to hydroseed, simply add in the number of recommended bags per 1000 gallons of hydro-mulch solution. It's simple, quick and relatively foolproof.

Erosion control contractors all agree – the keys to maximizing profits are (1) using time efficiently, (2) reducing waste and (3) keeping application errors to a minimum. With the one-two punch of the premium SLOPEMASTER[®] mixture and state-of-the-art packaging, contractors have an effective and proven erosion control product they can depend upon to maximize their bottom line.

SLOPEMASTER[®] mixes are packaged in applicator friendly bags for ease of handling and to help reduce seed waste and application errors.



All Slopemaster[®] mixes have a unique ingredient called Durana White Clover which benefits Solar farms.

- Cool season legume that can be planted year-round with nurse crops
- As many as 97 stolons per sq. ft.
- 150 lbs per acre of nitrogen annually
- Improves soil tilth and organic matter
- Perennial Plant lasts multiple years
- Attracts beneficial insects
- Prolific Bloomer 40% more blooms than ladino clover
- Blooms spring late summer





Durana White Clover Enhances Sustainability And Performance Of Slopemaster[®]

Responding to the professional erosion control industry's desire for a permanent, more sustainable and aesthetically pleasing slope vegetation mix, Pennington developed the ultra popular SLOPEMASTER® professional erosion control product. SLOPEMASTER® mixes are a special blend of technologically advanced seed varieties selected specifically to grow and thrive on poor soil



sites under challenging conditions with minimal maintenance. **SLOPEMASTER®** mixes feature Durana white clover - the most persistent and versatile clover available in the marketplace today. When compared to other clovers, Durana is more heat and drought tolerant and

 ${\rm SLOPEMASTER}^{\circledast}$ mixes feature Durana white clover. With over 97 stolons per sq. ft., Durana forms a thick mat that holds soil in place

exhibits better insect and disease resistance. University tests have proven it to be tolerant of poor soils with low fertility and low pH. With as many as 97 stolons per sq. ft., Durana forms a thick, water penetrable mat that holds highly erodible soils in place. It is unique in that it spreads across the top of the ground much like bermudagrass, covering any open ground between grass plants to provide 100% soil cover. As a legume, Durana improves soil structure and "manufactures" up to 150 lbs. of nitrogen per acre annually which it shares with companion plants such as tall fescue, bahia and bermuda. It is a perennial

plant that has a long growing season (up to 10 months) and regrows both from live stolons and from volunteer reseeding. Durana produces an array of



Durana produces an array of beautiful white blooms that is pleasing to the eye and attracts many species of beneficial insects.

beautiful white blooms that is pleasing to the eye and attracts many species of beneficial insects. These multiple attributes combine to make Durana white clover a great fit for SLOPEMASTER[®] mixes.

SLOPEMASTER[®] features Durana white clover – the most persistent and versatile clover available in the marketplace today.

THE **SOPPOSER** ADVANTAGE Professional Erosion Control Seed Mixture

- Formulated specifically for your area
- · Permanent and sustainable year round soil cover
- Technologically advanced seed varieties designed for tough growing conditions
- Packaged to eliminate waste
- · Easy to plant, low maintenance, one bag solution
- Advanced seed treatment technology for faster germination, stronger root systems and healthier plants that require less fertilizer and water



Mastering Erosion Has Never Been Easier!

For more information, call 1-800-588-0512, email proturfsolutions@penningtonseed.com or visit www.pennington.com/pro-turf