



FALL 2013 E NEWSLETTER

Research on using composts and other amendments for establishment of roadside vegetation

Dr. Rebecca Brown, Associate Professor of Plant Sciences at the University of Rhode Island has recently reported preliminary results of ongoing research focused on the use of soil amendments for the establishment of roadside vegetation. Road side soils are typically very poor in quality and thus establishment and maintenance of vegetative cover is challenging. In her research with RIDOT Dr. Brown has been evaluating the use of a variety of biosolids based products (including pellets and composts) along with leaf and yard waste derived compost as sources of nutrients and organic matter.

The various residuals were added to the roadside soils at three (3) different rates. Test plots were seeded with a standard seed mix of perennial ryegrass, Kentucky blue grass and red fescue in early fall and plots did not receive supplemental fertilization. Evaluation of the plots for turf height and quality was performed in the spring (April/May).

Although these are preliminary results of an ongoing trial, soil amendment treatments of biosolids and biosolids composts that provided 3 lbs of nitrogen per 1,000 sq. ft. appear to all work well providing improved turf quality yet not resulting in excessively tall growth that would require more frequent



mowing.

When applying biosolids products that are relatively high in nutrients there are concerns that excess nutrients could be lost to the ground water. Dr Brown's study looked at nutrients that leached from below the root zone and found that nitrate and phosphorus leaching was not greater than the untreated control plots except at the very highest application rates.

Thus, it would appear that composted biosolids, as well as other biosolids products, can be very effective for establishing turf on poor quality soils and when used at proper application rates there is little or no risk of nutrient leaching. Use of soil amendments at excessive rates should be avoided as it can lead to not only excessive vegetative growth but also nutrient losses. Since amendments can vary widely in nutrient content, it is recommended that they be applied on the basis of nitrogen content rather than at a set ratio of amendment to soil.



Local Farm Sees Benefit from Using Compost

Applefield Farm located in Stow, MA is a 25 acre diversified farm specializing in variety of seasonal, vegetables, fruits, and flowers. The farm also has large greenhouses for bedding plant, hanging basket, annual, and perennial production.

In the fall of 2012, farm managers Steve and Ray Mong decided to spread & till Agresource' s All Natural Compost on several acres to improve his low-organic soils and help improve crop production. Six hundred cubic yards of compost with about 50 yards spread per acre boosted soil organic matter content from approximately 3% to just under 5% and provided about 110 lbs. per acre of available nitrogen.

According to Steve and Ray, results in the first year were significant. Without any fertilizer used in areas where the compost was applied, crop vigor was noticeably increased. Picking and pruning routines were modified from previous years due to the increased rate of crop growth. A bumper crop was harvested in 2013.

More compost was spread this year and the plan is to take soil samples and monitor soil organic matter, nutrients, and pH over time. Once the goal of optimum soil health is achieved spreading compost will be suspended.



Terra Seeding Helps Stabilize Detention Basin Soils



The city of Peabody, MA has been on TV news most every time there are major storms passing over the region. The Scouting Way Detention Basin is a 3-acre detention basin being constructed as part of the watershed storm water management program to alleviate flooding in downtown Peabody.

Approximately 50,000 CY of fill have been removed from the site and a series of storm water containment areas and swales are being constructed within the 3-acre basin. The basin side slopes are being terraseeded for stabilization. Sumco Eco Contracting chose Agresource's All Natural Compost made in Ipswich, MA for its ability to jump start grass seed and help stabilize slopes quickly.