

Keeping Customers Informed



Source: www.TurfMagazine.com

Are all fertilizers-organic, synthetic and all-natural-created equal?

There are numerous fertilizer products available in the professional lawn care and landscape industry. Organic, synthetic and all-natural fertilizers are all available, and plenty of debate exists about their use. Although all fertilizers generally contain the same basic ingredients package, lawn care and landscape professionals and homeowners alike often wonder: What's the best fertilizer to use on my turf? Are organics the most environmentally friendly option available? Are synthetics as bad as everyone says? What makes a fertilizer organic or all-natural, and are these two the same?



Bonemeal is one example of a processed organic fertilizer.

Naturally occurring organic fertilizers include manure, slurry, worm castings, peat, seaweed, humic acid and guano. Sewage sludge used in organic agricultural operations in the U.S. has been extremely limited due to United States Department of Agriculture (USDA) prohibition of the practice (due to toxic metal accumulation, among other factors).

Processed organic fertilizers include compost, blood meal, bonemeal, humic acid, amino acids and seaweed extracts. Other examples are natural enzyme digested proteins, fish meal and feather meal. Decomposing crop residue (green manure) from prior years is another source of fertility.

As the importance of green and environmentally friendly efforts increase in the lawn care and landscape industry, many professionals, along with their clients, have an increased interest in the organic versus all-natural fertilizer debate. Many are leaning heavily toward using these fertilizers on their turf, offering industry professionals opportunities to expand their service and product offerings to include organic and all-natural fertilizer applications.

Think before you jump

Before jumping onboard the green movement, it's important to understand that while many products may use the terms "organic" and "all-natural" interchangeably, organic fertilizers and all-natural fertilizers are two different types of fertilizers with different meanings, components and characteristics. It's equally important that lawn care and landscape professionals understand the differences so they can educate clients and help them make informed fertilizer choices for their landscapes.



Organic compost can be used as a processed organic fertilizer.

PHOTOS COURTESY OF AGRIUM ADVANCED TECHNOLOGIES

"Being green is all the rage today; everybody is looking to use green and environmentally friendly options to maintain landscapes," said John Bladon, agronomist at Agrium Advanced Technologies. "Being green is great. However, before professionals advertise what they offer in terms of fertilization, they need to understand the differences between fertilizer types, as each offers distinct characteristics – this is particularly true of organic and all-natural, because despite what some have been led to believe, they aren't the same."

Organic fertilizers have standards

Standards for organic fertilizer vary widely depending on which agency's standards are being followed. Technically, fertilizer is outside the purview of U.S. federal guidelines, unless the fertilizer is being used on products to be sold under the USDA Organic label. Fertilizers are regulated, but only on a state-by-state basis, so consumers should read labels and know what "organic" means to them before using fertilizer.

Before the USDA was put in charge of the National Organic Program (NOP), a program that sets requirements for different types of USDA Organic labels, organic products were regulated by more than 30 certifying entities. While fertilizers aren't governed by the NOP, many products that are governed by the NOP require the use of fertilizers. USDA certification requires that products labeled organic must be produced without synthetic substances or sewage sludge. Exceptions to the nonsynthetic requirement are tracked on the National List of Allowed and Prohibited Substances.

Fertilizer claims, including organic claims, are only directly regulated by states. Most state officers in charge of implementing these regulations belong to the American Association of Plant Food Control Officers (AAPFCO), which works to develop uniform rules that become a de facto standard across the states. However, AAPFCO works with the chemical, rather than agricultural definition of organic, focusing on carbon content.

While the NOP established a single set of standards for many products, fertilizers were omitted from regulations. The Rodale Institute reported that some organic farmers lost certification after using fertilizers that were legally labeled "organic," yet prohibited under the NOP. Internationally,

organic fertilizers are listed on the Codex Alimentarius, compiled with the help of the United Nations' World Health Association. The Codex standards are written so that most fertilizers, organic or not, would qualify, except for the methods of preparation.

All-natural fertilizers not regulated

While many think all-natural fertilizers are synonymous with and have the same qualities as organic fertilizers, that is not the case. Unlike organic fertilizers, all-natural fertilizers aren't regulated, and they generally offer less material consistency. Therefore, the meaning, characteristics and properties of an all-natural fertilizer can vary widely from company to company and product to product. As their parent source material shifts in composition, so too can the qualities of the end product. In fact, something "all-natural" may just come out of the back of your neighbor's pickup truck.



Granular organic fertilizers are generally easier to spread than all-natural fertilizers because all-natural fertilizers sometimes have an inconsistent texture and vary from product to product.

"While all-natural fertilizers can have similar ingredients as organic fertilizers, they aren't regulated, and they can contain ingredients that wouldn't pass an organic inspection," added Bladon. "No organizations exist to regulate all-natural fertilizers or to monitor the ingredients being put in them.

"It's important to note that although 'all-natural' is a term used widely in the lawn and landscape industry, it has various meanings and no real legal definition," continued Bladon. "All-natural fertilizers aren't necessarily organic, and it's important that lawn and landscape professionals understand the regulations, work with reputable suppliers and have all this information to communicate clearly with customers."

The difference is usually in the spreadability

Granular organic fertilizers are generally easier to spread and apply than all-natural fertilizers because of consistency. It's not always the case, but one of the biggest challenges that professionals run into with some all-natural fertilizers is inconsistent texture and the resulting spreadability challenges of the product.

"Because the ingredients in all-natural fertilizers can vary drastically from product to product, and these fertilizers aren't necessarily pelletized or granulated when produced or processed, they are sometimes inconsistent in texture; spreadability is affected because of this," Bladon suggested.

Transportation: the enemy of organic and all-natural

The biggest enemies and drawbacks of organics and all-natural fertilizers are transportation and shipping costs. "Organic and all-natural fertilizers have much lower nitrogen concentrations than other commonly used fertilizers.

Because of this, a bag or truckload of organic or all-natural fertilizer will typically fertilize less area than a bag or truckload of traditional or synthetic fertilizer,” said Bladon. “The great benefit to organic or all-natural is generally when it’s sourced locally. This helps reduce overall cost and, certainly, the carbon footprint associated with transporting large quantities of organic or all-natural fertilizers. It makes less sense to use organic fertilizer when you have to transport it thousands of miles; it almost negates the environmental benefits reaped from using it. This is where synthetics deserve due consideration.”

The choice is yours

At the end of the day, fertilizer choice comes down to the preference of each lawn care and landscape professional and client.

“Plants actually don’t know the difference,” suggests Bladon “Water, soil and the soil’s biological complex all ultimately share the responsibility of turning nutrients from fertilizers into a form that the turfgrass can use.”

Interestingly, while many are concerned about the nitrogen content of fertilizers, it’s important to remember that the air we breathe is composed of 78 percent nitrogen gas. Fertilizer manufacturers are simply fixing that nitrogen and turning it from a gas into a more useable solid form.

“It’s important that lawn and landscape professionals weigh the advantages and disadvantages of multiple fertilizer options, and discuss these advantages and disadvantages with industry experts and clients to determine which option is best for each landscape,” said Bladon.

John Bladon operates his own management, consulting and communications firm, and supports Agrium Advanced Technologies’ wholesale and “Direct Solutions” distribution networks around the world through training, technical support, education and management of research data.