

COMPOST + THE RIGHT SPECIFICATIONS = HIGH PERFORMANCE FOR LANDSCAPE INSTALLATIONS

Pick up any trade publication these days, and compost use is likely to be included as a featured topic.

The emergence of composting as a mainstream recycling tool for manufacturing and processing residuals has brought to the marketplace a wide variety of readily available compost products for large-scale landscape installations and horticultural applications.

Compost is a proven winner for turf, planting beds, erosion control, and other large greenscape projects. It's easy to apply using conventional equipment, can enhance almost any planting project, and often out-performs synthetic soil amendments.

These versatile products may be incorporated during construction or applied as top-dressings. If purchased from a reputable source, they are safe to use in any public space, at any time of the year or crop cycle.

With the growth of the compost manufacturing industry has also come pricepoints that make the specification of recycled organics not only environmentally prudent, but also economically sound.

But, not all composts are created equal and the right specifications are critical factors in guaranteeing product performance.

Compost qualities. Specification writers who make the mistake of equating compost with soil, fertilizer, or mulch end up with disappointing results and unhappy clients.

Like dirt, a premium compost is dark in color and exudes a pleasant, earthy aroma ... but, compost is not the same as topsoil.

Like fertilizer, most composts provide nutrition to growing plants ... but, nutrient retention is far superior to synthetic fertilizers.

Like mulch, quality compost has the ability to function as a surface treatment to hold in moisture and keep roots cool ... but, while compost can be used as a mulch, mulch should not be used in place of compost.

It is the task of the landscape architect to not only base specifications on quality standards appropriate to the intended use, but also application rates that will guarantee long-term plant vigor.

Beyond NPK. Those unfamiliar with compost use often make the mistake of evaluating products solely on the basis of the key macronutrients nitrogen, phosphorus, and potassium (NPK).

While it's true that most compost products do have nutrient and micronutrient values that must be



considered when calculating agronomic loading rates, NPK is just one of the many benefits of compost use.

Just as important are other factors like high buffering capacity, neutral pH, moisture retention, and improved soil tilth and Cation Exchange Capacity.

The soil amendment has also been shown to suppress some soil-borne diseases and improve nutrient uptake through microbial activity.

Compost offers a complete range of macro and micronutrients, as well as a reduction in nutrient runoff and leaching. This keeps more of the nutrients at the root zone for slow-release over one or more growing seasons.

When using compost for the first time, many growers have been successful with a formula that reduces conventional fertilizer use by one-half when incorporating 20 tons of compost (or more) per acre.

In subsequent years, growers may be able to further reduce the use of synthetic fertilizers.

Quality is not measured in NPK. Specification writers must consider these factors when developing guidelines for compost purchase and use.

It's impossible to gauge the quality of a compost product without some sort of measuring tool, but simple NPK analysis is not the tool to use.

NPK numbers are quantitative indicators used to determine application volumes. NPK has traditionally established a product's price tag.

But, unstable or immature composts

with desirable NPK values compete with plants as the organic matter progresses through its stages of biodegradation, retarding growth.

High salt content or marginal pH can also have a negative impact on plant vigor.

The U.S. Composting Council (USCC) has developed a set of national standards to be used in evaluating compost products. These testing standards include the requisite NPK, but they also include salinity, maturity, germination rate, and other values.

Compost manufacturers who participate in the USCC Seal of Testing Assurance program

send samples one or more times a year (depending on volumes produced) to a laboratory certified by the USCC.

These laboratories (only a handful are certified nationwide) have special equipment and personnel qualified in the testing and evaluation of compost products.



For more information ...
Compost and the Landscape Architect
New standards make compost more reliable for landscape use



By Ron Alexander
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American Society of
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