quality slow-release materials—are less expensive and contain two and sometimes three times more nitrogen by percentage than natural fertilizers.

Natural service is not something lawn and landscape maintenance businesses can barge into with their eyes closed. But, it is something they're increasingly willing to offer in addition to their established programs to attract that still-small and specialized portion of the market.

Or they want to protect their own clients from the encroachment of a competitor's new and aggressively marketed alternative program. Even the larger, production-driven application companies show refreshed interest in customer service. Increasingly, they're tailoring programs to accommodate smaller markets within markets.

Today's natural organic products are processed, deodorized (as much as raw materials will allow), and some are pelletized. Several suppliers claim their products can be applied in spreaders as conveniently as manmade materials.

Also, natural products can be mixed with manmade products such as urea-formaldehyde. The turfgrass rootzone biota benefits from the addition of organic matter and a host of micro nutrients, while the UF provides a green-up to the turf, particularly in the spring when the ground is still too cool for natural material to break down and release its nutrients.

Industry describes these products as hybrid or bridge products. Most of the LCOs spoken to by LANDSCAPE MANAGEMENT magazine said the cost of these products (somewhere between manmade and totally natural organic materials) would make them easier to incorporate into a professional program.

Although some of the public is raising questions about groundwater contamination and chemical use on lawns, turfgrass managers can demonstrate—facts at hand—that the environmental benefits of using manmade fertilizers far outweigh any threat.

Yet some of the public perceives that natural products are somehow safer, at the very least more acceptable, than synthetic products.

—Ron Hall

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**On the golf course: natural fertilizers a supplement**

When asked about fairway treatments, Bateman says one fairway, treated organically, had what he describes as a "less visible" disease presence, although that was not supported by testing.

**John Pennypacker**, superintendent at the Greenbriar Country Club in Chesapeake, Va., began supplementing his synthetic fertilizers with a natural organic product (Sustane) in the summer of 1989.

"Sand-based greens have become the thing of the future," he says, "but they also have been a royal pain to a lot of superintendents. There are no bacteria or micro-organisms in the sand to help combat disease."

Pennypacker says he wanted to keep the greens growing without the surge growth he sees with IBDU (isobutyldiene diurea) fertilizers. So he applied 8/10 lb. of Sustain per green per month from May to August and "started noticing a large reduction in pythium and brown patch."

Synthetic products remain a part of Pennypacker's arsenal, and are used from September to December, and in January if the weather is not too cold. "We need them after a long, hard summer," says Pennypacker. "You get root development, and about 10 days after you apply them."

For the club's rescue lawn, Pennypacker tried a "bridge product" (containing both synthetic and natural organic elements), at a 1 lb./1000 sq. ft. rate.

"In about five days, the synthetic that was present released, giving a quick green-up. And about 10 days later, everything greened up," Pennypacker notes. A second application after 15 days of rain brought "astounding" results.

A supplemental application of Lesco's Twosome helped eliminate some lingering brown patch.

—Terry McIver