

Lawn & Landscape MAINTENANCE

MORE THAN 43,000 SUBSCRIBERS MONTHLY

APRIL 1992 • \$2.50

THE EASY SELL

*Visibility, name
recognition and
longevity make
selling irrigation
a cinch for
Andy Wright.*

ALSO IN THIS ISSUE:

**Marketing
Irrigation Services**

**Wetlands
Development**

Plant Fertilization

Turf Insect Control

USERS BEWARE?

As the need for compost increases, the numbers supplying product will also expand. Landscapers should be prepared to demand consistent, quality compost.

By Ron Alexander

OVER THE PAST 15 years, the composting of organic waste materials has become an extremely popular solid waste management tool. The composting of sewage sludge became a preferred mode of management in the '80s, and it's possible the '90s will find the same trend in dealing with leaf/yard waste and municipal solid waste.

The composting of food processing residues, animal manures and other agricultural wastes are also on the increase. Keeping these trends in mind, there is no doubt that the volume of compost available to the green industry will increase exponentially by the end of the decade.

As compost quantities increase, more companies will be trying to sell products. This is a plus, because high quality compost has proven to be a valuable commodity to the landscape industry. Unfortunately, as the volume of compost and the number of compost producers increase, the likelihood of inferior product finding its way to the market also increases.

The benefits of using compost are numerous. Compost:

- is rich in organic matter
- is rich in macro- and micro-nutrients
- improves friability/workability of soil
- improves cation exchange capacity of growing media
- can improve drainage and percolation rate of growing media
- can improve water-holding capacity of growing mix
- can suppress soilborne plant pathogens
- is relatively inexpensive

However, in order to cash in on the benefits of using compost, it is important to understand what is being purchased. By understanding what to look for when



selecting compost, the chance of receiving a product which is inferior in quality, or inappropriate for a particular application, will be minimized.

COMMON MISCONCEPTIONS. In order to properly use compost products, it is important to understand what they are, what they are used for and to dispel any misconceptions. Composted organic materials are often referred to as "fertilizers" or "artificial topsoils." They are neither.

Fertilizers are purchased and used for their innate nutrient val-

The screening process: Compost produced with different levels of refinement have different uses.

ue. They supply plants with the nutrition they need to flourish. Although some composts are used, in part, because they contain appreciable amounts of nutrition, long-term benefits come from their content of organic matter.

Dictionaries define topsoil as "the surface or upper part of the soil." Individuals who use topsoil define it as a naturally produced media consisting of sand, silt and clay, organic matter, trace

amounts of nutrition and other inerts, in which turf, trees, etc., can be grown.

Compost is not topsoil because it cannot be used in the same manner as topsoil. Generally, it is not a good idea to grow plant materials in 100 percent compost; whereas, most plants can survive in good quality topsoil.

Compost is a material produced from decomposed organic substances which often contain some fertilizer value. Compost is used as an amendment or additive to soils and other growing media because of its positive physical, chemical/nutritional and biological effects.

Another misconception is that all composts are alike. Although many composted materials are similar visually, chemical and biological properties may differ. For example, sludge composts have a higher nitrogen content than municipal solid waste composts, and animal manure and mushroom composts have a higher soluble salt content than leaf/yard waste composts.

Compost produced from different feedstocks and with different levels of refinement, have different specific uses. For example, compost produced from municipal solid waste will generally possess a greater water holding capacity than other composted materials. This is because the waste stream, from which it is produced, contains a great deal of paper. This compost is therefore ideal for use in areas where drought conditions exist (sandy soils) or where low maintenance occurs (roadsides).

SPECIFICATIONS. The type of compost used on a specific project will depend on the product's

(continued on page 42)

Users Beware?

(continued from page 40)

characteristics and the use for which it is intended. Therefore, it is imperative to understand enough about compost to know which products should be used and where.

Although it is difficult to describe the perfect compost for a particular use, an ideal "general use" compost should possess these qualities:

1. Organic matter content of 50 percent or more
2. Meets state and federal regulations
3. Moisture content between 35 percent and 50 percent
4. Density weight of approximately 1,000 lbs. per cubic yard
5. pH of between 6 and 7
6. Carbon/nitrogen ratio of approximately 30:1
7. Adequately cured/mature
8. Screened to meet specific needs
9. Free from weed seeds
10. Free from objectionable odor and foreign matter

Understanding why specific



product quality issues are important will help you purchase and use a product which best suits your specific needs.

Product consistency. Regardless of the quality of the compost being used, it is important its quality and characteristics do not significantly vary from load to load. Even a "poor quality" compost has specific end uses, as long as its characteristics remain consis-

tent.

Only through the production of consistent product can long-term markets be found for its use. Consequently, both contractors and customers must make sure compost suppliers can guarantee consistent product on an ongoing basis.

Moisture content. The moisture content of compost is important to product users because it affects

Plant material feedstocks await composting.

product handling. Compost which is dry, under 35 percent moisture, can be dusty and irritating to work with. If it becomes too dry, it will become hydrophobic and not easily re-wet.

Compost which is wet, more than 50 percent moisture, can become heavy and clumpy, making it difficult to work with. Compost which is too wet can also cause application difficulties and extra expense in delivery.

Avoid using dry compost in plant growing mixes because it may cause the mix to become hydrophobic. Avoid using wet compost on projects where extensive hand work is necessary. Wet compost is probably best used on large soil incorporation projects where the product can be spread and incorporated by mechanical means. Also, note that the composting process can only take place within specific moisture parameters. So, product which is

(continued on page 44)

Questions about...

Your subscription?

Display advertising?

Classified advertising?

*Our Technical
Resource Guide?*

 Call toll-free

800-456-0707

Users Beware?

(continued from page 42)

excessively wet or dry, may not be properly composted.

pH. The pH of a compost product depends on the compost feedstock, additives (lime), and the composting process itself. Most commercially available composts have a pH of between 5.5 and 7.5. In some products lime is added before or after the composting process.

Unlimed composts are commonly considered more versatile products because they can be used in more applications. This is because limed compost is more difficult to buffer or

more difficult to alter its pH for a specific use. Compost with a lower pH, and ones which are not limed, are better to use in soils which have a high pH or in commercial growing mixes. Most greenhouse and nursery crops are grown in media possessing an acidic pH.

Compost with a higher pH, or ones which have been limed, are better to use in acidic soils or in areas where a more basic growing media is needed. Never use limed compost, or ones that possess a high pH, when growing acid-loving (ericaceous) plants.

Texture. The texture or particle size of compost is affected by both degradation occurring in the compost process, and by product screen-

ing. Almost all commercially available composts are screened. This enables the producer to market a product which is consistent in particle size and free from foreign matter.

The size of the screen used depends on both the type of compost being screened and the targeted markets for which its use is intended. Finely screened composts are excellent to use as turf topdressings, and are usually found more appropriate to bag. Coarser products may be used in growing mixes where texture may improve drainage, or in soil incorporation projects where the bulk density of the soil needs to be decreased.

Compost produced from specific feedstocks must be more finely screened to produce a highly marketable product. For example, compost produced from municipal solid waste is known to contain more man-made inerts such as film and hard plastics. These materials cannot be entirely removed before composting, and must therefore be removed through screening after composting is complete. To accomplish this, a 1/4-inch screen (or the equivalent) is usually used.

Odor. Compost products, like many products, have a distinguishable odor or scent. Properly composted materials have a discernible earthy scent. Compost should never possess a sulfurous or ammonia-like odor. These odors could be the result of improper composting or of poor storage conditions, and may be unacceptable for certain applications.

Because excessive odor may be the symptom of a more serious problem, it's advisable not to use odorous composts on high valued crops such as nursery and greenhouse plants. To avoid potential complaints, the use of composts possessing objectional odors should be avoided in areas which are highly trafficked such as homeowner lawns or high profile commercial sites.

It is also important to note that normal compost odors dissipate rapidly once the product is applied, and are usually non-existent once the compost has been mixed with other materials.

Curing. Proper curing (stabilization) is essential to the production of a high quality compost. During curing, compost has the opportunity to further stabilize, pile temperatures decrease and moisture content is reduced. Curing also allows for the reduction of soluble salts and the continuation of pathogen destruction.

Proper and thorough curing will improve the quality of composts which have not been thoroughly composted. These "immature" composts may stunt plant growth, cause nitrogen immobility and may contain phytotoxic materials. When immature compost is applied and begins to decompose, it uses nitrogen, thus robbing nutrition which could otherwise be used by the plants grown in it.

Immature compost may also contain organic acids which are detrimental to seed germination and plant growth. Tests have been developed which can determine whether a compost

(continued on page 46)



Weathermatic
Made in the U.S.A.
LawnMate
The Ultimate Turn-On

Water Conservation Just Got Easier

Green-Tech
April 29-30
1992
See the
LawnMate
at Booth
#1017

List Price: LM7 \$159.95 LM12 \$209.95

Test Post	Station Dial
LCD Display	Water Budgeting
Stack Timing	Long/Short Timing
Multiple Programs	7-Day Battery Back-up
Multiple Start Times	Start-up/Back-up Program
Remote Sensor Circuit	Weekly/Interval Calendar

I'm very satisfied. They are simple to program, do everything you need and are well priced.
John Mueller, Mueller Sprinkler, Westminster, Colorado

Since installing the LM, I have cut my installation and programming time in half. I also have had less call backs.
Bruce E. Vidinhar, Sound Landscaping & Maintenance, Silverdale, WA

We have lost NO programs due to lightning or marginal electric service, and That's a Fact!
John A. Heidman, Irri-Tech, Dallas, Texas

Users Beware?

(continued from page 44)

is mature or not. Mature composts have a carbon/nitrogen ratio of between 25-30:1.

Keep in mind that product quality is controlled by many factors such as proper composting and curing, storage and environmental conditions, the chemical makeup of the compost feedstock and screening/final processing. It is important to know as much about your compost supplier or producer as possible.

Along with the assurance of product quality, we as customers have other specific needs which are important to discuss.

CUSTOMER NEEDS. As more compost is produced and marketed, landscapers will have the task of choosing a supplier. Hopefully, increased competition for business will improve the quality of product available, keep product pricing in check and improve customer service.

It is important to find a reputable supplier. A supplier should have a history of good customer service, be reliable and provide high quality, consistent products. Whether your compost source is a facility or broker, it must be able to provide product when needed. This need is accentuated because of the seasonability of the landscape industry.

In order to assure product availability, it's helpful to know the production and storage capacities of your source facility. How a product is going to be delivered to your site and who will arrange for delivery are other questions which should be considered.

It is important that your supplier not only employ reliable truckers, but truckers with the proper equipment to deliver compost. The size of the truck and the mode of unloading the compost must meet your specific site requirements. Remember, it is often more important to have the product delivered when and where you need it, than it is to get the cheapest price.

Your compost supplier should also be able to supply you with specific technical data and compost use assistance. They should be able to supply you with test data in support of their product quality claims and even arrange a personal visit to the compost facility. Your supplier should also be able to provide research data pertaining to product use, as well as detailed product literature which explains how

prentox[®] Turf and Ornamental Products

Use Prentox[®] brand insecticides to prevent insect damage to turf and ornamentals. Products include Chlorpyrifos (Dursban[®]), Diazinon, Lindane, Malathion and Methoxychlor Emulsifiable Concentrates, wettable powders and granules. Call your local distributor for further information.

**PRENTISS
INCORPORATED**

C.B. 2000 Floral Park, NY 11001 • (516) 326-1919
15 S. Prospect Ave., P.O. Box 701, Park Ridge,
IL 60068-0701 • (708) 825-0020
P.O. Box 40301, Fort Worth, TX 76140 • (817) 293-9649
P.O. Box 55, Roswell, GA 30077 • (404) 552-8072



prentox[®] is a registered trademark of Prentiss Incorporated. Dursban[®] is a registered trademark of DowElanco.

**Compost quality
is controlled by many
factors; it's important
to know as much about
your supplier or
producer as possible.**

to optimally use the product.

In order to satisfy any of your other product-use needs, your supplier should employ a service-minded staff that can assist you in working through daily situations and problems. Your supplier should also provide you with access to technical representatives who can supply in-depth product-use assistance.

A good supplier is also open to your suggestions and willing to work to satisfy your particular needs.

Bear in mind that there is a cost involved in responding to customer needs, and even many of the quality issues. Buying an inferior product for a superior price is no deal. Also, if a supplier can provide you with the technical assistance and service you desire, don't be afraid to pay for it.

Remember, every compost product is different, every supplier is different and so is every customer. Don't be afraid to find the ones which best suit your company's needs. ■

The author is the compost marketing/utilization specialist for E&A Environmental/EM-CON Inc. He is responsible for directing all compost marketing studies and use programs at E&A, and is currently managing its compost marketing assistance program.