

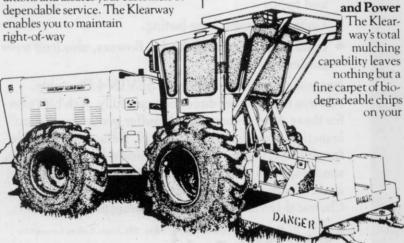
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Performance



way
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largest tree

Continued from page 20

however, are sometimes used for cart vokes and tent poles. Aerial roots, before reaching the ground, have many strands at the lower end. The furnish coarse fibres for making rope. The latex is used in making rubber, and the twigs and leaves for fodder for elephants and cattle.

Banyan trees grow in at least sixteen tropical and semi-tropical countries around the world, within the limits of approximately thirty degrees north latitude and thirty degrees south latitude. In the United States they grow only in Florida and California (excepting perhaps rare speciments elsewhere) for ornamental purposes and shade.

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So, as in the case of Highland Colonial Bentgrass with its 8 million seeds per pound, you are buying a huge potential. Other grasses, which might cost less per pound may also have less potential grass plants so that from a practical standpoint they're more expensive than Highland.

Why not write for our free calculator. You'll find it a handy, fast method of comparing **actual costs** of planting bluegrass, ryegrass, bentgrass and fescue.

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Highland Colonial Bentgrass Commission

Dept. T Suite One, Rivergrove Bldg.' 2111 Front St. N.E. Salem, Oregon 97303

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Careful pruning can rejuvenate trees, shrubs

If woody ornamentals in your landscape need corrective pruning, the time is at hand, says a landscape horticulturist with the Texas Agricultural Extension Service.

"The key to pruning is to have a purpose in mind," emphasizes Everett Janne. "If you cannot justify the removal of a limb or branch, you better put up your equipment and go spade the garden for exercise."

Some reasons for pruning include removing dead or winter-killed growth or balancing the top with the root system when setting out new plants. Diseased or insectinjured wood as well as storm or accident-damaged limbs should be removed as soon as possible, notes the Texas A&M University System specialist.

"Older shrubs can be rejuvenated by removing the older branches at the base. Pruning can also help develop a desired shape or size as well as aid in producing better flowers and fruit," points out Janne.

However, he cautions agains severe pruning. It is better to prune lightly and more often to prevent sunscald to the sensitive inner branches.

And, never leave stubs that invite the entry of insects and disease. Paint all wounds or cuts over three-fourths of an inch in diameter with a wound dressing available at any nursery or garden center. In lieu of regular wound dressing, common orange shellac makes a good temporary dressing.

"Plants which bloom in early spring with the appearance of new leaves should be pruned after they flower," explains Janne, "while those that bloom later in the spring or summer should be pruned now while they are dormant."

To make pruning easier and for good, smooth cuts, always use sharp tools, adds the horticulturist.



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The fertilizer facts and fiction of blended versus granulated

by Roger A. Brown

For those who make a livelihood by maintaining fine turf, as well as the do-it-yourself homeowner who is particular about his picturesque lawn, high quality fertilizer is indispensible. This means the right nutrients must be present. It also means good storage, handling and spreading properties. Here is where the manufacturer's skill and integrity are paramount. As it is with most things, there is the right and wrong way to manufacture fertilizer

Companies selling ammoniated or granulated turf fertilizers sometimes point an accusing finger at blended products and claim they are inferior. In many cases, this has been a fair accusation but with others it was a way to divert scrutiny of their own products.

Special turf blends

Generally, dry blended fertilizer is made specifically for bulk farm spreading and crop use. Farm fertilizers tend to be high in phosphorous and potash and low in nitrogen. Almost the opposite is required by turf. As a consequence, most blenders combine Ammonium Nitrate (33 1/3-0-0) or Urea (45-0-0) with Triple Super Phosphate (0-60-0), Diammonium Phosphate (18-46-0), Muriate of Potash (0-0-62), and limestone. Some of these raw materials are high in salt content and are immediately available.

Because of the large volume of fertilizers needed by farmers, cost is an important consideration. Blenders tend to buy the best deal in price and sometimes sacrifice uniformity in particle size. Fertilizers lacking particle uniformity would not be recommended for turf.

The quality and analysis ac-

curacy of ammoniated or granulated fertilizer is almost entirely dependent upon the manufacturer's facilities and the plant superintendent. The best superintendents or ammoniating foremen are those having the experience and knowhow of when and how much of each ingredient to add to get an acceptable granule. It is a skill learned over the years that not everyone can master.

If ammoniated products are not dried properly in production or are not able to "cure" (chemically react) in bulk storage they may harden after they are bagged, thus making application difficult and tedious.

It is very rarely true that each granule in an ammoniated product contains the same analysis as printed on the bag. The larger granules tend to be high in phosphate and the smaller are high in potash. Many times, the fines are 100 percent potash. Most farm grades are easy to ammoniate because they are high in phosphate content.

Phosphoric acid helps the granulation process and produces a harder granule. An easy analysis to ammoniate would be a 1-2-1 ratio, such as 5-10-5. The higher the nitrogen and potash and the lower the phosphate, the more difficult the ammoniation process.

High vs. low analysis

The home lawn analysis, 20-10-5, has been popular for a long time, not because it is a good ratio for grass, but because its high phosphate content makes it easier to granulate.

A 25-5-10 analysis would be a very difficult fertilizer to manufac-

ture and in some plants it would be altogether impossible.

A high concentration analysis like 25-5-10 or 33-3-10 doesn't allow room in the formula for the chemical reaction needed to create the necessary granulation action. That is why a low analysis high phosphate product can be hard, free flowing, uniform and dust free.

On the other hand, a high analysis, low phosphate fertilizer might be inconsistent in particle size with a soft surface that cannot withstand transportation and wears down causing a dusty product.

Some companies will make a base grade and blend nitrogen with it to form a high nitrogen analysis with better spreadability. In this case, you have a blended product of nitrogen and base.

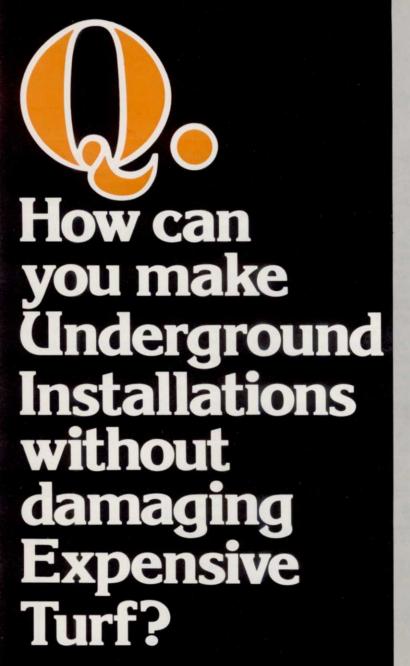
Key is uniformity

The key to a good blended product is uniformity in particle size. If the manufacturer buys raw materials with uniform screen size as a prime consideration, uses good judgment and housekeeping to eliminate dust, and screens the finished product, an excellent non-segregating free flowing fertilizer can be the result. A company that uses these practices had a better analysis test record in one state than its ammoniating competitors.

Certain unique forms of nitrogen such as I.B.D.U. and sulfur coated urea as well as chelated sources of iron and other trace elements cannot be ammoniated because the heat of the process destroys their slow release and available properties. These important nutrient sources have to be blended with a base product to be available in a complete fertilizer.

Careful planning of a blended

Continued on page 28



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for outdoor lighting and other types of service lines all may be installed quickly and efficiently with a vibratory plow. Since no ditch is dug, there's only minimal turf damage. Let your Ditch Witch dealer show you the right plow for your needs. He offers the most complete line of vibratory plows available. Charles Machine Works, Inc., P.O. Box 66, Perry, Oklahoma 73077. TWX 910-830-6580. For the name of your nearest dealer Call Toll Free (800) 654-6481.



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fertilizer facts and fiction

Continued from page 26

product can produce a beautiful combination of uniform prills that will be dust free, hard surfaced, nonsegregating and excellent for broad-

cast application.

Because of environmental controls and the high cost of building and maintaining a large ammoniation plant, fewer are in existence. Today there are only 200 ammoniating plants versus 5,000 blend plants in the USA.

In determining which type of fertilizer is best - the blend or the granulation, the following are the important points to use in making your judgment:

1. Who are you buying it from? Are they reputable? Do they stand behind what they sell?

2. Who is the manufacturer? Will they be here tomorrow? Are they

capable of producing a consistent quality fertilizer?

3. Does the product meet your nutritional requirements? Does it have the desired ratio of nitrogen, phosphorous and potash? Does it include water insoluble nitrogen? Does it contain the secondary and micro or trace nutrients you need? Does it contain the type of nitrogen and potash you prefer?

4. Will it spread properly? If for golf greens, are the particles fine enough so that the mowers will not pick them up? If for large turf areas, are particles uniform and large

enough for broadcasting?

5. Is it manufactured in such a way that it won't segregate and streak the turf? Is it uniform in particle size? Will the product flow easily through the spreader?

If all the above questions are answered with "yes" then compare the cost. If the product meets all of the above requirements to your satisfaction and the cost is competitive, then buy it whether it is a blend or granulated.

Make grass stand up for its roots!

Roger A. Brown is currently sales manager for The Andersons lawn fertilizer section. With over 25 years of experience in the specialty and turf chemical industry, he was active in the research and development of aquatic weed control chemicals and pelleted calcium arsenate.

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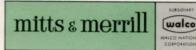
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Symposium explores urban forest vegetation

Most trees aren't cut out for city living.

The metropolitan environment is hostile to trees, and Nature has produced few species adapted to urban conditions, said Dr. George H. Moeller, Program Coordinator for the Pinchot Institute of Environmental Forestry Research, in the Foreword of a recently published

Symposium Proceedings, "Better Trees for Metropolitan Landscapes."

The publication, 29 papers by 36 authors representing a variety of disciplines, is the result of a Symposium attended by more than 200 professional and technical people to provide up-todate information about tree selection, cultural practices, evaluation and testing techniques, and tree-breeding methods for trees to be used in urban environments.

The information will be useful to shade tree commissions and municipal arborists in helping decide which trees to plant under different site conditions. The Northeastern Forest Experiment Station of the Forest Service, U. S. Department of Agriculture, published the Symposium proceedings.

Urban forest vegetation is important to man's environment. Besides being esthetically pleasing, it provides recreational sites, protects and maintains water supplies, filters waste water, provides habitat and sanctuary for wildlife, enhances property values, abates noise, cleans the air, and improves the climate.

Problems arise from the fact that conditions found in metropolitan environments are unique and that most trees now being used in urban areas do not have the ability to withstand the hostile conditions existing there.

Unnatural environmental stresses such as clay fill, soil compaction, and reflected heat from buildings and concrete cause considerable damage and lead to and compound insect and disease problems.

The solution? According to Moeller, it is essential to develop trees that are biologically and functionally adapted to metropolitan environments as well as being esthetically pleasing.

Copies of this 256-page publication are available form the Government Printing Office, Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402. Ask for stock number 001-001-00421-9. The cost is \$3.25 per copy.



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