THE FERTILIZER FACTS AND FICTION OF BLENDED VERSUS GRANULATED

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.

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 (33⅓-0-0) 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 accuracy 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 know-how 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% 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 ration, such as 5-10-5. The higher the nitrogen and potash and the lower the phosphate, the more difficult the ammoniation process.

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 manufacture and in some plants it would be 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 spread-ability. In this case, you have a blended product of nitrogen and base.

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 product can produce a beautiful combination of uniform prills that will be dust free, hard surfaced, nonsegregating and excellent for broadcast 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 on 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, phosphorus 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 IT'S ROOTS!

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How many times have we heard an employee make a statement in regards to a promotion, that he felt should have come to him rather than to another one of his group of employees. Possibly the reason was the person who received the promotion always realized that **THERE IS NO SUBSTITUTE FOR HARD WORK.** Keep this in mind and you may be the next in line for a promotion!