

# LAWN FERTILIZERS

Fertilizer is thought of as something which when applied to the soil makes plants grow better. Usually, fertilizer contains one or more of the three primary plant nutrients—Nitrogen (N), Available Phosphate (P<sub>2</sub>O<sub>5</sub>), and Potash (K<sub>2</sub>O).

More properly, fertilizer should be defined as a substance which contains one or more of the plant food elements, which can be absorbed by plants and which promote the growth of plants. This is true of both “organic” and commercial fertilizers.

Fertilizers are refined or upgraded products of nature containing one or more of the essential plant nutrients. They contain nothing that is not already present in productive soil.

Nitrogen fertilization plays an important role in the production of good quality turfgrass. To maintain good color and healthy growth, adequate nitrogen must be available throughout the growing season. The behavior of nitrogen in soil is quite different from that of the other major fertilizer elements, phosphorus and potassium. Chemical reactions occurring in the soil are such that phosphorus and potassium are held in the soil and are not easily leached. One application of these elements usually supplies ample amounts throughout the growing season. In contrast, soluble forms of nitrogen are readily lost from the soil by either plant uptake, leaching, or volatilization; repeated applications of soluble sources must be made to keep nitrogen available for turfgrass use.

Another nitrogen available would be your prolonged availability or slow release. We can take a quickly available nitrogen in a high analysis, such as urea, and we can make that same material feed the lawn over a period of time; in fact, up to four or five months. All we have to do is either coat it with plastic or coat it with sulfur or chemically react it with formaldehyde, and this slows down the solubility of this product.

Slow release nitrogen generally used in turf and lawn fertilizers are Ureaforms, or natural organics. Ureaforms gradual feeding is regulated by the temperature, moisture, or microbial release to coincide with the growing seasons of the grasses. It is non-leaching, staying in the soil to develop healthy root systems.

Quickly available sources have relatively high nitrogen contents and are the least expensive forms of fertilizer nitrogen. The soluble sources have high salt indexes, thus a high potential for fertilizer burn. Because solubles are subject to leaching, more frequent applications of lower rates per 1,000 sq. ft. contribute to more efficient utilization of nitrogen. A soluble source of nitrogen is urea.

In addition to nitrogen, other elements-phosphorus, potash, calcium, sulfur, magnesium, iron and other minor elements are needed for healthy turf.