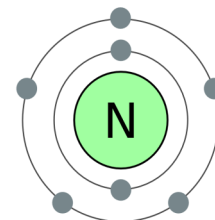


There or Not There?

Nitrogen is the most ephemeral of the key plant nutrients. Its availability in the soil depends on factors including the temperature and moisture of air and soil, the composition and condition of soil, and the activity level of soil organisms. It's so transient that most soil labs don't include it among the parameters they test for in a soil sample.

Nitrogen is critical for plant growth. It is a fundamental part of chlorophyll, and when leaves contain sufficient nitrogen, photosynthesis occurs at high rates. That's why one of the important warning signs of nitrogen deficiency is yellowing, pale green leaves (especially if this chlorosis develops in the oldest leaves) and indolent plant growth despite fine weather.

Some plants are particularly heavy "feeders" or users of nitrogen, including roses, corn, lettuce, tomatoes, squash, cucumbers, and cabbage, to name a few. Gardeners who grow nitrogen-hungry plants may have to replenish this element when needed.



There are several types of nitrogen in the soil. First is inorganic nitrogen, which would be ammonium and nitrate. These elements are commonly introduced through fertilizer but also exist naturally. Ammonium is held onto the soil, and it can be converted into nitrates relatively quickly by soil bacteria. Nitrates aren't held so tightly in the soil, thus nitrogen leaching can occur in a well-draining soil during heavy rains or overwatering. SBS Composts, which are teeming with beneficial bacteria, will aid in ongoing nitrate conversion. In addition, adding SBS Compost will provide organic nitrogen (plant food ready to be consumed) directly, with no elemental conversion involved. This is why our compost works so well in the short-term and the long-term.

The key to avoiding de-nitrification is to have a soil that is teeming with beneficial bacteria and productive fungi, with a texture that lends itself to holding onto beneficial elements like nitrogen, while not allowing excessive drainage to occur. SBS' **Ready-To-Plant** soil blend combines all these attributes as the optimum planting medium for routine landscape plants. This mix delivers sustained performance while holding on to the appropriate level of moisture, even during our hot summers, and provides the ideal pH balanced environment for your installations.

