

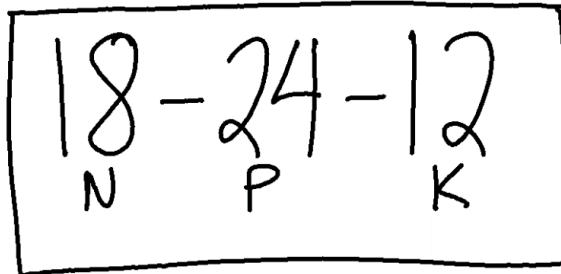


Spencer Horticultural Solutions

Homegrown Horticulture

TIPS FOR SUCCESS IN YOUR OWN BACKYARD

Fertilizer Labels – What do they mean?



Fertilizers can come in many forms and formulations. Some are granules that are meant to be spread over the surface and then mixed into the soil using tools or by rain or irrigation. Other products are powders that dissolve when mixed into water (water-soluble); these will be applied to the plants during watering.

Regardless of the formulation, packaged fertilizers contain a certain amount of the actual nutrients for the plants, and an amount of carrier material. The amount of each nutrient (nutrient content) is detailed on the package as a percentage value. To calculate how much of nutrients will be applied, you take the weight of the product that you are going to apply and multiply it by the percentage of the specific nutrient.

The numbers on the bag correspond to the main nutrients that are in the fertilizer. The numbers are usually labeled with their corresponding nutrient. Normally, the fertilizers are listed as Nitrogen (N), Phosphorus (P), and then Potassium (K). The next number will often be sulfur, followed by a range of micronutrients (nutrient elements that are required in very small amounts). Using the analysis of the fertilizer (the percentages), you can calculate how much total product that you will have to apply to reach the rates of fertilizer that you want to apply. Alternatively, you can figure out what sorts of rates you will be applying if you apply a certain amount of product to an area.

For example, if you have a 100-pound bag of 10-52-10, it will contain 10 percent nitrogen, 52 percent phosphorus, and 10 percent potassium, or 10 pounds N, 52 pounds P, and 10 pounds of K, as well as 28 pounds of carrier material.

To apply 5 pounds of nitrogen to an area, you would have to apply 5 pounds of the product, however you would also be applying 26 pounds of phosphorus and 5 pounds of potassium at the same time, as well as a small amount of micronutrients.

In a pinch, most home garden products have mixing or application instructions for different areas and plant types.

