



Fertilizer for the home lawn

Fertilizers are substances that support the quality or quantity of plant growth by providing elements that are essential to the plant's metabolic processes. When properly applied, fertilizer can improve plant vigor, make leaves grow larger and improve plants' resistance to damage from weeds, insects and disease. The glowing green in a healthy lawn is really the colour of well-nourished and healthy plants.

What do plants require for optimal growth? Plants obtain the two most important of these elements, carbon and oxygen, directly from the air. A third vital element, hydrogen, is taken from water in the soil.

Through their root systems, the grass plants in a lawn obtain nutrients from the atmosphere, and, through their root systems, from soil minerals, organic matter, and applied fertilizer. The nutrients must be first dissolved in soil moisture in order to be absorbed by plants. Organic matter, organic fertilizers and some slow release fertilizers must be broken down by soil microbes before the nutrients can be absorbed by plants.

Fertilizers provide the most readily available source of nitrogen. The relative proportion of the major nutritional elements is listed on the fertilizer package.

Nitrogen (the first number on the fertilizer bag)

Nitrogen is essential for the manufacture of chlorophyll in plants. For this reason, new plant growth is virtually impossible without nitrogen. Lawns that lack nitrogen will turn light green or yellow, and leaves will die, starting at the tips.

The nitrogen found in organic fertilizers is released more slowly compared to that in synthetic fertilizers. Organics help to provide continuous fertilization throughout a growing season.

Phosphorus

The second nutrient element listed on a fertilizer package is phosphorus. It is an important plant nutrient because it assists in stimulating root growth, and phosphate deficiency will mostly affect the root area. Phosphorus is most available to plants when the soil is warm and moist and where the soil pH is between 6.5 and 7.





Potassium

Potassium is the third of the 'big three' nutrients. It is essential for the manufacture of sugar, starches, and proteins by plants. Potassium is very important to plants especially during extreme cold or warm temperatures or in drought conditions. It helps plants cope with the stresses of traffic, summer heat, winter cold, diseases, and insects.





Secondary nutrients and micronutrients

Lawns also require smaller amounts of other essential elements. The secondary nutrients are calcium, magnesium, and sulfur. Other elements called micronutrients, which are required in extremely small amounts, are iron, manganese, zinc, boron, copper, molybdenum, and chlorine. These are the 'spark plugs' of plant nutrition, required only in small amounts but, without them, the plant doesn't 'go' anywhere.

All high-quality lawn fertilizers are mixed in the proportion that meets the needs of healthy, growing lawns. Apply fertilizers three or four times per year as per the label directions or as recommended by a soil test, and watch your turf grow thicker and healthier.

