

## Fertilizer Helpful Info

Nitrogen (first number)	Phosphorus (second number)	Potassium (third number)
<p>Nitrogen is a primary nutrient that really makes plants "grow." When you put fertilizer on your lawn, most of the "green-up and grow" comes from the nitrogen.</p> <ul style="list-style-type: none"> <li>• There are 'quick release' and 'slow release' forms of nitrogen. Slow release forms are more expensive but remain effective for a longer period of time. Organic fertilizers are slow release, and have less potential to "burn" plants.</li> <li>• Nitrogen produces vegetative growth in plants, but too much nitrogen can cause problems. One problem is succulent growth, which makes a plant more susceptible to certain diseases.</li> <li>• 78% of our atmosphere is nitrogen, and rain and snow account for 2 to 12 pounds of actual nitrogen per acre (43,560 square feet), per year. "Lightning charged rain" is high in NH<sub>4</sub> and NO<sub>3</sub>. Snow has been called "poor man's manure". . . now you know why!</li> <li>• Plants in the Legume family "fix" atmospheric nitrogen into the soil. Peas, beans, clover, and alfalfa are legumes, as</li> </ul>	<p>Phosphorus is a primary nutrient that encourages rooting, blooming and fruit production in plants.</p> <ul style="list-style-type: none"> <li>• Vegetable gardeners have typically been told to apply 5-10-5 since the higher middle number (P) helps vegetable production.</li> <li>• Phosphorus is important for root-growth and blooming in plants, and is the main ingredient in "starter fertilizers" as well as liquid fertilizer "bloom boosters".</li> <li>• Applications of super-phosphate (0-20-0), triple super-phosphate (0-46-0), or bone meal (organic source) can be used to correct deficiencies.</li> <li>• Since phosphorus moves very slowly through the soil, it should be incorporated into the soil prior to, or during planting. In existing lawns, we recommend core-aeration prior to phosphorus application.</li> </ul>	<p>Potassium helps plants resist disease and aids in winter hardiness. ("K" is the symbol for "kalium" or potash, and is commonly used to represent potassium)</p> <ul style="list-style-type: none"> <li>• Most 'winterizer' fertilizers used on lawns in late fall are high in Potassium, since it promotes winter hardiness in turfgrasses.</li> <li>• Potassium fertilizers have a high "salt index" and should be used with caution, since they can "burn" plant foliage.</li> <li>• Most "complete" fertilizers contain potassium since it is fairly mobile, and readily leaches out of the soil profile.</li> </ul>

well as Black Locust trees.		
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## Organic Fertilizers and Herbicides:

Morgan County Seed is a good source. They are located at:  
 18761 Kelsay Road  
 Barnett, MO 65011-3009  
 (573) 378-2655

**Organic Fertilizers:** Organic fertilization can be done anytime of the year without burning out grass. It is scheduled differently. Organic materials work by feeding the microorganisms and invertebrates present in the soil and they actually release the nutrients into the soil. You probably know this, but it is a process that works more slowly but lasts a longer time.

**The Corn Gluten products** can be applied now as a natural herbicide as it puts a fuzzy coat on seeds so that they won't germinate. It should not be applied to lawns at the same time as the lawn is seeded as it has the same effect on grass seed. It can be applied after the grass has germinated.

**Grub Control:** Morgan County Seed also carries Milky Spore. It is a natural product that can be used for grub control. When applied directly to the area where grubs are feeding it will kill the grubs but not other wanted insects like our pollinators the butterflies and bees and other beneficial insects.

**Other Natural Products:** Morgan County Seed carries the most products that you hear of but don't know where to find. Such things as Horticultural Vinegar for weed control and BT and Insecticidal soap which are effective but not as harmful.

**Organic products should be tried first when using Integrated Pest Management.**