

## **No P on my Lawn!**

Did you know that within the Commonwealth the highest levels of soil phosphorus (P) are in urban areas? Four out of 5 soil samples from lawns and gardens have so much phosphorus that there is a risk of it running off after rainfall, while only 1 in 3 soil samples from agricultural fields have a high risk. Runoff from urban lawns with excess phosphorus can cause serious consequences for local waterways and wildlife, impacting our local water recreation opportunities.

### **Problems with P**

Excess phosphorus promotes rapid and over abundant algae growth, which can lead to harmful algal blooms. [Harmful algal blooms](#) occur when toxin-producing algae grow excessively in a body of water. Algal toxins released into the surrounding water or air can seriously harm people, animals, fish, and other parts of the ecosystem. In other algal types, an excess of algae grows in abundance consuming most of the oxygen in the water causing widespread fish kills. These harmful changes to local waterways result in restricted access to recreation areas.

### **Test, Test, Test!**

How do you know if you have a lawn high in phosphorus? It's easy! [Test your soil](#). Contact your county extension agent for details. Your agent will be able to help you interpret your soil test results and determine exactly what your lawn needs and when to apply the correct amount of fertilizer.

### **Fertilizer by the Numbers**

What do the three numbers (10-10-10, 17-17-17, 10-20-10, etc.) on a bag of fertilizer mean? Each number represents the percentage of three different nutrients plants use to grow and be healthy.

**% Nitrogen (N) - % Phosphate ( $P_2O_5$ ) - % Potash ( $K_2O$ )**

A bag of 10-10-10 fertilizer has 10% Nitrogen, 10% Phosphate, and 10% Potash.

### **Choose P-free Fertilizer**

Don't have time to test your soil? No worries! Chances are, if you live in an urban area of Kentucky, your soil has enough phosphorus for a healthy lawn and garden. Choose phosphorus-

free fertilizer by simply buying a fertilizer with “0” as the middle number, such as 10 - 0 - 10. Your local waterways will be healthier for you, your pets, and local wildlife.

### **Suggested Social Media Text**

Most Kentucky soils have plenty of phosphorus (P). In fact, many are so naturally rich in phosphorus that adding more increases the risk for polluting our waterways. Excess phosphorus promotes rapid and over abundant algae growth which disrupts ecosystems, harms wildlife, negatively impacts water recreation and may contain toxins that sicken people and pets. Conduct a soil test before applying fertilizer. When purchasing fertilizer look for “0” in the middle number.

### **References and Resources:**

AGR-53 Lawn fertilization in Kentucky

[https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1009&context=anr\\_reports](https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1009&context=anr_reports)

HENV-402 Water Quality and Nutrient Management at Home.

<http://www2.ca.uky.edu/agcomm/pubs/HENV/HENV402/HENV402.pdf>

ID-201 Your Yard and Water Quality

<http://www2.ca.uky.edu/agcomm/pubs/id/id201/id201.pdf>

US EPA Harmful Algal Blooms <https://www.epa.gov/nutrientpollution/harmful-algal-blooms>

[\*AGR-16: Taking Soil Test Samples\*](#)

[\*AGR-57: Soil Testing: What It Is and What It Does\*](#)

[\*Soil Testing and Fertilizers for Home Lawns \(YouTube Video\)\*](#)