

SOIL TEST INFORMATION SHEET NO. G-803

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Group III Vegetables - Home Garden Recommendations (Beans, Beets, Okra, Peas (Field peas also known as Southern peas) Radishes, and Sweet Potatoes)

1. Soil pH is the most important factor when making fertilizer recommendations. Correct pH problems prior to applying fertilizer. In most cases, if pH levels are too low, individual nutrients may be taken up by plants too rapidly and cause symptoms related to nutrient toxicity. If the soil pH is too high, individual nutrients have a hard time unbinding from the soil and moving into plant roots, causing nutrient deficiency symptoms. Sometimes you will also see nutrient deficiency symptoms when the soil pH is correct but when the air and soil temperatures are too cool or the soil is too wet. These nutrient deficiency symptoms occur because the plant is not actively growing and therefore not actively pulling nutrients from the soil into their tissue.
2. When to fertilize: There are two key times to fertilize vegetable plants during the growing season.
 - The first is PRE-PLANT fertilization or applying fertilizer to the soil before you plant your crop. Make sure that you irrigate your garden area or allow a rain to fall between fertilizer application and before planting your crop. Most home gardeners apply all three major macronutrients (Nitrogen (N), Phosphorus (P), and Potassium (K)) to their garden during the preplant fertilizer application.
 - The second fertilizer application is called SIDE DRESSING. Side dressing occurs in direct seeded crops well after the first true leaf has formed. In transplanted crops, side dressing occurs when the plants are actively growing. The term side dressing comes from the fact that the fertilizer application is applied to the side of the row or 4-6 inches from the main stem of the vegetable plant. Home gardeners usually focus most on nitrogen (N) only for the sidedress fertilizer application. However, if you see signs of micronutrient deficiency, you can also apply those as a sidedress application. When side dressing, try and incorporate the fertilizer into the row, or apply granular fertilizers and water them in to avoid having them sit on the soil surface for prolonged periods.
3. NOTE: If planting in containers, using potting mixes that include fertilizer, using this fresh soil is the equivalent of a preplant fertilizer application. You may only need to sidedress. If the potting soil is several years old and you are using it with no additional soil added, you will want to add fertilizer at preplant and sidedress application periods. Please note that gardeners typically use water-soluble and slow-release fertilizers with potting soil. Potting soil unlike soil in the ground in your backyard is composed of mostly peat moss. Peat moss reacts with fertilizer very differently than mineral based soil. THEREFORE, YOU WOULD HAVE INDICATED TO THIS SOIL LAB THAT YOU ARE TESTING A POTTING MIX... NOT ACTUAL SOIL. Your results will be drastically different if you use the wrong submission sheet.

4. Contact your county agent for additional information and help in your fertilization program. The agent also receives a copy of this report for the parish office files.

How to Fertilize

Vegetable Crop	Ideal Soil pH Range	Specific Notes on Pre-plant fertilizer application	Specific notes on Sidedress fertilizer applications
Beans (Snap and Lima (Butter))	6.0-6.5	Apply 100% of the total recommended Nitrogen, Phosphorus and Potassium in the preplant fertilizer application for SNAP BEANS. Apply 100% of the total recommended Phosphorus and Potassium and 50% of the total recommended Nitrogen in the preplant fertilizer application for LIMA (Butter) BEANS.	Do NOT sidedress snap beans. Sidedress the remaining 50% recommended Nitrogen 3-5 weeks after the beans sprout for LIMA or BUTTER BEANS.
Beets	6.0-6.5	Apply all of the phosphorus and potassium and 50% of the recommended nitrogen fertilizer at planting.	Apply the remaining 50% of recommended nitrogen 5-6 weeks after planting.
Okra	6.0-6.5	Apply all of the phosphorus and potassium at planting and 75% of the recommended nitrogen fertilizer.	3-4 weeks after planting side dress if the plants look nutrient deficient. Side dress again after ratooning the crop in late July/August.
Field/ Southern Peas	5.8-6.5	Apply all recommended fertilizer (nitrogen, phosphorus and potassium) at pre-plant fertilizer application.	Do Not sidedress.
Radish	6.0-7.0	Apply all of the recommended nitrogen, potassium and phosphorus preplant. A granular application of boron at preplant will help prevent brown interiors.	Do not sidedress unless the radish look nutrient deficient.
Sweet Potato	5.8-6.2	Apply all of the recommended potassium and phosphorus preplant.	Apply all the recommended nitrogen 3-4 weeks after planting and also apply a low rate of boron at this time as well.