

SOIL TEST INFORMATION SHEET NO. G-802

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Group II Vegetables - Home Garden Recommendations (Mustard, Broccoli, Brussels sprouts, Onions, Cabbage, Cantaloupe, Carrot, Cauliflower, Collards, Cucumber, Eggplant, Garlic, Kale, Kohlrabi, Lettuce, Parsley, Peppers (Hot), Peppers (Sweet), Pumpkin, Rutabaga, Shallots, Spinach, Squash, Turnip, Watermelon)

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.
 - 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
Broccoli, Brussel sprouts, Cabbage, Cauliflower,	6.0-6.5	Apply 50% of the total recommended Nitrogen in the preplant fertilizer application.	For broccoli, distribute the remaining 50% of nitrogen to the plants 2-3 weeks after planting and again every 2-3 weeks. For Brussel sprouts, Cabbage and Cauliflower, apply the remaining 50% of recommended nitrogen 2-3 weeks after planting only adding more if the plants show signs of deficiency. These crops are also heavy boron feeders. Based on soil and plant tissue samples, you may also want to apply one application of a liquid boron fertilizer to the foliage following rates on the label.
Collard, Kale, Kohlrabi, Lettuce, Mustard, Spinach	5.8-7.0	Apply 75% of the recommended nitrogen at preplant application.	Distribute the last 25% of recommended nitrogen in small increments weekly until harvest. When harvesting all crops but head lettuce and kohlrabi, harvest 1-2 inches above the soil line. Apply a light rate of nitrogen to stimulate a second crop/ harvest.
Garlic, Onions, Shallots	5.8-6.5	Apply 50% of the total recommended nitrogen to the crop at the pre-plant fertilizer application.	Apply 25% of the remaining nitrogen fertilizer 4-5 weeks after planting and the last 25% 3-4 weeks after that.
Carrots	5.5-6.5	Apply 50% of the total recommended nitrogen to the crop at the pre-plant fertilizer application.	Apply 25% of the remaining nitrogen fertilizer 3-4 weeks after planting and the last 25% 3-4 weeks after the sidedress application.
Eggplant, Peppers	5.5-6.8	Apply 50% of the total recommended nitrogen to the crop at the pre-plant fertilizer application.	Side dress when the first flower clusters set on the plant and again at the second flower cluster set.

How to Fertilize (continued)

Vegetable Crop	Ideal Soil pH Range	Specific Notes on Pre-plant fertilizer application	Specific notes on Sidedress fertilizer applications
Cantaloupe, Cucumber, Pumpkin, Squash, Watermelon	5.8-6.5	Apply 2/3 of the total recommended nitrogen to the crop at pre plant fertilizer	Apply the last 1/3 of recommended nitrogen to the crop when the plants begin to run.
Rutabaga, Turnips	6.0-6.5	Apply 50% of the total recommended nitrogen to the crop at the pre-plant fertilizer application. Consider applying granular boron to the soil with the pre-plant fertilizer to avoid brown centers in the root tissue.	Apply the other 50% of the nitrogen fertilizer when plants are 5-6 inches tall.