K-STATE Research and Extension

KSU Soil Testing Laboratory 2308 Throckmorton Plant Sciences Center 1712 Claflin Road Manhattan, KS 66506-5503



Tel: 785-532-7897 Fax: 785-532-7412 www.agronomy.ksu.edu/soiltesting

| Soil Test Report | Billing Account #: 116 | Sample Inform | Sample Information: | |
|--|--------------------------|-------------------------------|---------------------|--|
| | | Sample ID: 18132 - Makeict-SW | | |
| Prepared For: | Send Copy To: | | | |
| Rebecca McMahon | Deborah Anderson | Order Number: | 42523 | |
| Sedgwick County Extension (Veg. Garden) | 1130 N Forrest Ave | Lab Number: | 006235 | |
| 7001 W. 21st Street N | Wichita, KS 67203 | | | |
| Wichita, KS 67205 | | Received: | 2/13/2023 | |
| | | Reported: | 2/16/2023 | |
| 316-660-0100 | 316-204-8495 | County: | Sedgwick | |
| rmcmahon@ksu.edu; dbindrum@ksu.edu; jskerr@ksu.edu | debandersonwho@gmail.com | (where sample was taken) | | |

Results

| Analysis | Value Found | Analysis | Value Found |
|---------------------------|----------------|-----------------------------------|----------------|
| Soil pH (1:1, soil:water) | 7.6 | Buffer pH (Sikora) | 7.5 |
| Organic Matter (LOI), % | 4.0 % | Nitrate - N surface or 1st sample | 41.8 ppm |
| Phosphorus (P) Mehlich-3 | 107 ppm | Potassium (K) | 420 ppm |

Vegetable Garden

Nutrient Graph

| Nutrient | | Very Low | Low | Medium | Optimum | High | Very High |
|----------|-----|----------|------|--------|---------|------|-----------|
| рН | 7.6 | 4. | .0 5 | 5.6 6 | 5.0 | 7.0 | 7.5 |
| Р | 107 | 1 | 1 3 | 31 4 | 46 | 76 | 100 |
| К | 420 | 7 | 5 1 | 41 2 | 200 | 221 | 300 |

Recommendations:

pH: The pH is high for your plants. Do not add wood ashes as this will further raise the pH. Mix $1\frac{1}{2}$ pounds of sulfur per 100 square feet into the soil in the fall or before planting in the spring to lower the pH. Pelletized sulfur is easier to work with than the dust though either will work.

Fertilizer: The levels of phosphate and potassium in your soil are very high. Additional phosphorus/potassium is not required at this time. Use one of the following fertilizers at the recommended rate to provide the nitrogen needed:

Iron + (12-0-0) at 1 pound (2 cups) per 100 square feet (use only if the pH is above 7.0) Nitrate of Soda (16-0-0) at 3/4 pound (1.5 cups) per 100 square feet Urea (46-0-0) at 1/4 pound (1/2 cup) per 100 square feet. 30-3-3, 25-4-4 or something similar at the rate of 1/2 pound (1 cup) per 100 square feet

The 30-3-3, 25-4-4 or something similar are lawn fertilizers but will work as long as the fertilizer does not contain a weed preventer or weed killer. Just make the sure the first number is between 24 and 33.

The fertilizer should be mixed 6 inches into the soil before planting. A rototiller works well for mixing but hand mixing with a garden fork is also possible. Vegetables may need additional fertilizer during the growing season to be productive.

Organic Matter: The organic matter is medium-high. You can add up to 3" of additional organic matter, but you may not want to add additional nitrogen fertilizer until later in the season.



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References (Crop Related):

Top or Side-Dressing Nitrogen Fertilizer

http://www.ksre.k-state.edu/lawn-garden/fruit-vegetable/Sidedressing%20from%20Gregg 20Eyestone.pdf