

"Vegetable Garden" Soil Test Report for ~~XXXXXXXXXX~~ "GARDEN" (Feb 27, 2024, #K53444)

		<u>Below Optimum</u>	<u>Optimum</u>	<u>Above Optimum</u>
<u>Phosphorus (P)</u>	45 ppm			
<u>Potassium (K)</u>	87 ppm			
<u>Magnesium (Mg)</u>	280 ppm			
<u>Calcium (Ca)</u>	2050 ppm			
<u>CEC</u>	12.8 meq/100 g			
<u>Soil Type</u>	Mineral	<i>*For more information on each individual nutrient, or the bar graph, click on the underlined word.</i>		
<u>Soil pH</u>	7.5			
<u>Lime Index</u>	72			
<u>Organic Matter</u>	4.7 %			

Follow Your Personalized Recommendations

Important: Always apply fertilizers according to label instructions

Your soil test indicates, on a yearly basis

per 1,000 sq. feet:

- **Nitrogen** (3 to 4 lb) is needed
- **Phosphate** (3.3 lb) is needed
- **Potassium** (4.5 lb) is needed
- Maintain organic matter

See below for more information on each

The following are typical fertilizers that can be used to satisfy the nutrient requirements of your garden. If the particular fertilizer is not available, choose a fertilizer close to the prescribed fertilizer and use the [Fertilizer Calculator \(/tools/fertilizer-calculator/\)](/tools/fertilizer-calculator/) to determine how much nitrogen, phosphorus and potassium the fertilizer you choose applies.

Desired fertilizer ratio - 1:1:1

	Analysis	Fertilizer Rate (lb/1000 ft ²)
Example 1	12-12-12	30
Example 2	5-5-5	72
Example 3	2-2-2	180

Example 1. Manufactured Fertilizer: Apply 12-12-12 fertilizer at 20 **pounds per 1000 sq ft** before planting and till into soil. Make a second application of 12-12-12 fertilizer at 10 **pounds per 1000 sq ft** 3 weeks after plants emerge and till in between the rows.

Option 1 Characteristics: More readily available for plant uptake, more concentrated form of nutrients, generally less expensive per pound of fertilizer nutrient.

OR

Example 2. Manufactured Fertilizer: Apply 5-5-5 fertilizer at 48 **pounds per 1000 sq ft** before planting and till into soil. Make a second application of 5-5-5 fertilizer at 24 **pounds per 1000 sq ft** 3 weeks after plants emerge and till in between the rows.

OR

Example 3. Natural Organic Fertilizer: Apply 2-2-2 fertilizer at 119.99 **pounds per 1000 sq ft** before planting and till into soil. Make a second application of 2-2-2 fertilizer at 59.99 **pounds per 1000 sq ft** 3 weeks after plants emerge and till in between the rows.

Option 3 Characteristics: Nutrients released more slowly, can be more expensive if high fertilizer rates are needed, and can supply organic matter.

Notes:

Approximate conversion of lb of nutrient needed to cups of nutrient needed: Ground limestone (1 lb = 1 1/2 cups); Most complete fertilizers (such as 12-12-12, 1 lb = 2 1/4 cups); Urea (46-0-0, 1 lb = 2 1/2 cups).

It is recommended that compost be applied each year to the soil after harvest and tilled in. For every 100 pounds of leaf/grass compost applied per 1000 sq ft of garden area your fertilizer rate can be reduced by 1/10.

Organic Matter Recommendation

Organic matter in your soil is 4.7%. Your soil has an adequate level of organic matter. Annual addition of 2-3" of compost can help maintain soil organic matter and reduce the amount of commercial fertilizer you need to apply. After 3 years rate can be reduced by 1/2.

Lime recommendation for mineral soils

No lime needed.

Must-Read Tipsheets

- **Soil pH**
(https://www.canr.msu.edu/news/making_the_most_out_of_your_soil_test_ph_factsheet_now_available)
- **A Vegetable Garden Begins with a Soil Management Plan**
(http://msue.anr.msu.edu/news/smart_fertilizer_use_a_vegetable_garden_begins_with_a_soil_ma)
- **Fertilizer Basics**
(https://www.canr.msu.edu/resources/fertilizer_basics_for_the_smart_gardener/)
- **Fertilizer Application Methods and Placement**
(https://homesoiltest.msu.edu/sites/default/files//pdf/fertilizer_application_methods_and_placement_rebe)
- *Other Web Links...* (</tools/links>)

For help with specific questions you may have about your customized results

- **Fill out our "Ask an Expert" question form** (<http://www.msusoiltest.com/ask-an-expert/>)
- Call the MSUE Lawn and Garden Hotline, 1-888-MSUE-4MI (1-888-678-3464). This hotline is answered weekdays between 9:00- 12:00 pm and 1:00-4:00 pm.
- Visit the Gardening in Michigan web site, www.migarden.msu.edu
(<http://www.migarden.msu.edu/>)

View Another Report

[Click here to enter a different report code, or to input your soil values directly. \(/your-results?reset=true\)](/your-results?reset=true)

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