

Soil Test Report

Prepared For:

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Sample Information:

Sample ID: 17884 - Pollinator
Garden

Order Number: 39822

Lab Number: 000497

Received: 8/1/2022

Reported: 8/4/2022

County: Sedgwick

(Where sample was taken)

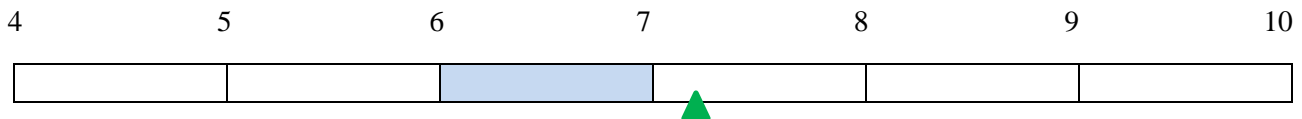
Results

Analysis	Value Found	Analysis	Value Found
Soil pH (1:1, soil:water)	7.2	Buffer pH (Sikora)	7.3
Organic Matter (LOI), %	2.6 %	Nitrate - N surface or 1st sample	45.9 ppm
Phosphorus (P) Mehlich-3	44 ppm	Potassium (K)	255 ppm

Annual & Perennial Flowers

Soil pH

(Shaded area is acceptable pH range for most annual & perennial flowers)



Shaded area below represents the level of nutrients in the area tested.

Nitrogen

0-25 ppm (Low)	25-50 ppm (Medium)	>50 ppm (High)
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Phosphorous

0-25 (Low)	26-100 (Medium)	>100 (High)
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Potassium

0-125 (Low)	126-250 (Medium)	>250 (High)
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Organic Matter

< 2 % (Low)	2.0 – 2.9 % (Good)	3.0 – 3.9% (Very Good)	> 4 % (Excellent)
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Recommendations

pH: The pH is higher than normal for most plants, including most annuals & perennials. The pH should be adjusted by adding 2 pounds of sulfur per 100 square feet to bring the soil to an optimum pH. If you are planting a new flowerbed, the entire amount of sulfur can be applied at once if the sulfur is tilled into the existing soil to a depth of 6 inches.

However, for flowerbeds with established plants, only ½ pound of sulfur per 100 square feet should be added at one time to established plant material. In this case, sulfur can be added each March and September until the total amount has been applied. For sulfur applications to be most effective, the sulfur should be lightly scratched into the soil. This allows the sulfur to enter deeper into the soil profile, and more quickly benefit the plant. Be careful so as not to damage the roots of your shrubs or trees. Pelletized sulfur is easier to work with than the dust.

Fertilizer: The level of phosphorus in your soil is medium, and the level of potassium in your soil is high. You have adequate levels of potassium and do not need to add more. Even though your nitrogen level is **good** or medium, nitrogen is regularly used up by plants, and naturally leaches from the soil profile and becomes unavailable.

Use one of the following fertilizers at the recommended rate:

- 12-22-6 at the rate of 1 pound per 100 square feet
- 18-46-0 at the rate of ½ pound per 100 square feet
- 20-27-5 at the rate of ¾ pound per 100 square feet

Some of the fertilizers listed above may be lawn fertilizers, but they will work well for our purposes as long as they don't contain weed preventers or weed killers. If you cannot find one of the above fertilizers, don't worry. Any fertilizer with the second number higher than the other two numbers on the bag (Nitrogen-Phosphorous-Potassium) would be a good choice. Just follow the directions on the bag for how much to use.

When fertilizing annual or perennial flowers, the fertilizer should be worked into the soil before planting. For existing perennial plants, fertilize in spring before growth begins. Scratch fertilizer in around existing plants to be most beneficial. If you have bulbs, fertilize at planting or when the foliage emerges in the spring.

The annual flowers should be fertilized again 4 to 6 weeks after planting with a high nitrogen fertilizer, such as one of the following:

- Iron + (12-0-0) at 4/5 pound per 100 square feet
- Nitrate of Soda (16-0-0) at 3/4 pound per 100 square feet
- Urea (46-0-0) at 1/4 pound per 100 square feet.

When fertilizing trees, fertilizer should be applied to the soil under the dripline of trees. Fertilizers should be applied in early spring before shoot elongation (before and during crabapple bloom) or late fall (just as fall color begins to develop) until leaf drop.

Organic Matter: The organic matter of your soil sample is good. Mulching flowerbeds with an organic matter (such as leaf clippings, compost, or wood chip mulch) will help increase the organic matter of your soil.

Recommendations by: Matthew McKernan

NOTE - For more information regarding fertilizing trees/shrubs, visit our publication, *Fertilizing Trees in the Landscape*: www.bookstore.ksre.ksu.edu/pubs/MF2707.pdf