



Soil Test Report

Reported To	Sample Information	
JIM CATRON 50 W 250 S LEBANON, IN 46052	Report Number	F17300-0765
	Report Date	10/31/2017
	Lab Number	12028
	Sample ID	A-CORN
	To Be Grown	VEGETABLE GARDEN

Analysis Results

Analysis	Result	Soil Test Rating				
		Very Low	Low	Medium	High	Very High
Organic Matter, %	4.2	████████████████████				
Phosphorus, ppm P (Bray-1 Equiv.)	43	████████████████████	████████████████████			
Potassium, ppm K	126	████████████████████				
Magnesium, ppm Mg	215	████████████████████	████████████████████			
Calcium, ppm Ca	1400	████████████████████				
Sodium, ppm Na	9	██████				
Cation Exchange Capacity, meq/100g	11.6	████████████████████				
pH	6.0	████████████████████				
Buffer pH	6.8					
Soluble Salts, mmho/cm	0.1	██████				
Sulfur, ppm S	11	████████████████████				
Zinc, ppm Zn	4.6	████████████████████				
Iron, ppm Fe	86	████████████████████	████████████████████	████████████████████	████████████████████	████████████████████
Manganese, ppm Mn	18	████████████████████				
Copper, ppm Cu	1.9	████████████████████				
Boron, ppm B	0.4	████████████████████				

Annual Nutrient Requirement

Pounds per 100 Square Feet						Pounds per 1,000 Square Feet					
Lime	Nitrogen (N)	Phosphorus (P2O5)	Potassium (K2O)	Magnesium (Mg)	Sulfur (S)	Lime	Nitrogen (N)	Phosphorus (P2O5)	Potassium (K2O)	Magnesium (Mg)	Sulfur (S)
5	0.4	0.3	0.3	0.0	0.1	45	4	3	3	0	1

Suggested Fertilizer Application

	NPK Fertilizer Grade	Description	Annual Application Rate	
			lbs per 100 sq. ft.	lbs per 1,000 sq. ft.
Product 1	21-0-0	Ammonium Sulfate	2.0	OR 20.0
Product 2	6-24-24	Low N Fertilizer	1.2	OR 12.0

Comments

Use the fertilizer listed above or another material of similar NPK analysis. Apply and incorporate 1/2 the recommended amount prior to planting or seeding. Spread the remaining 1/2 after plants are established and rapidly growing. Application of nitrogen in excess of the suggested amount could result in excessive growth of vegetation and poor yield of fruit for some garden plants.



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The soil pH is too low (acid soil). Use the lime rate listed above to correct this problem. For best results, mix the lime into the top 6 to 8 inches of soil in the fall or early spring before planting. Good quality lime may take as much as 1 year to correct the low pH.



Soil Test Report

Reported To	Sample Information	
JIM CATRON 50 W 250 S LEBANON, IN 46052	Report Number	F17300-0765
	Report Date	10/31/2017
	Lab Number	12032
	Sample ID	E-SQU
	To Be Grown	VEGETABLE GARDEN

Analysis Results

Analysis	Result	Soil Test Rating				
		Very Low	Low	Medium	High	Very High
Organic Matter, %	4.2	████████████████████				
Phosphorus, ppm P (Bray-1 Equiv.)	47	████████████████████				
Potassium, ppm K	314	████████████████████				
Magnesium, ppm Mg	290	████████████████████				
Calcium, ppm Ca	1500	████████████████████				
Sodium, ppm Na	50	██████				
Cation Exchange Capacity, meq/100g	11.3	████████████████████				
pH	6.8	████████████████████				
Soluble Salts, mmho/cm	0.1	██████				
Sulfur, ppm S	12	████████████████████				
Zinc, ppm Zn	5.0	████████████████████				
Iron, ppm Fe	108	████████████████████				
Manganese, ppm Mn	35	████████████████████				
Copper, ppm Cu	2.2	████████████████████				
Boron, ppm B	0.8	████████████████████				

Annual Nutrient Requirement

Pounds per 100 Square Feet						Pounds per 1,000 Square Feet					
Lime	Nitrogen (N)	Phosphorus (P2O5)	Potassium (K2O)	Magnesium (Mg)	Sulfur (S)	Lime	Nitrogen (N)	Phosphorus (P2O5)	Potassium (K2O)	Magnesium (Mg)	Sulfur (S)
0	0.4	0.2	0.0	0.0	0.1	0	4	2	0	0	1

Suggested Fertilizer Application

	NPK Fertilizer Grade	Description	Annual Application Rate	
			lbs per 100 sq. ft.	lbs per 1,000 sq. ft.
Product 1	21-0-0	Ammonium Sulfate	1.3	OR 13.0
Product 2	18-24-6	Lawn Starter	0.8	OR 8.0

Comments

Use the fertilizer listed above or another material of similar NPK analysis. Apply and incorporate 1/2 the recommended amount prior to planting or seeding. Spread the remaining 1/2 after plants are established and rapidly growing. Application of nitrogen in excess of the suggested amount could result in excessive growth of vegetation and poor yield of fruit for some garden plants.



INTERPRETIVE GUIDE FOR LAWN AND GARDEN SAMPLES

FACT SHEET

The Lawn & Garden Soil Test Report lists the results of analyzing a soil sample for its general fertility status. A graphic display shows the rating for each of the results related to optimum plant growth. Along with this are general fertilizer application rates suggested to either improve the fertility of the soil or maintain it. Finally, some comments are made specific to your planting requirements as listed on the submittal form. This Fact Sheet contains additional information about each of the sections in the report.

ANALYSIS RESULTS

Organic Matter measures the amount of plant and animal residues in the soil. Usually the darker the color of the soil the more organic matter is present. Organic matter is beneficial because it helps soil tilth and also adds plant nutrients as it breaks down. Organic matter levels in the soil may be increased by adding amendments such as leaf litter, grass clippings, manure, peat or muck. Where practical, strive for a level of at least 3 to 5 percent.

Phosphorus, Potassium, Calcium and Magnesium are essential nutrients for plants. Generally, when these nutrient tests are rated very low, low or medium, sufficient fertilizer or lime must be added to build up the soil. When ratings are high or very high, either no fertilizer is needed or just enough to maintain the current nutrient level is necessary. The source of phosphorus and potassium is usually commercial fertilizer or manure. Lime is most often the source of calcium and magnesium.

Cation Exchange Capacity (CEC) measures the capacity of the soil to hold nutrients. The higher the CEC reading the greater the capacity. Muck or peat soils may have CEC's far in excess of 25; heavy clay soils have CEC's from 15 to 25; loamy soils from 5 to 15; and sandy soils below 5. Although high CEC soils can hold more nutrients, they are not necessarily more productive. Much depends on good management. Soil CEC's may be lowered by adding sands or gravels and increased by adding clay, muck or peat.

Soil pH determines the level of active soil acidity or alkalinity. A pH of 7.0 is neutral. Values lower than 7.0 are acid (sour). Higher values are alkaline (sweet). Soils commonly range in pH from 5.0 to 8.0. Most plants grow best when the soil pH is between 6.0 and 7.0. When the soil pH is greater than 7.0, phosphorus and some trace minerals may be less available to plants. There are some acid loving plants such as blueberries, azaleas and rhododendrons which prefer more acid soils (less than 6.0). When the soil pH is too low (acidic), lime should be applied. When the soil pH is too high (alkaline), sulfur may be applied to help lower the pH.

Buffer pH is used to determine the amount of lime to apply on acid soils. A value is not given when the soil pH is greater than 6.8, since no lime is needed. The buffer pH starts at 7.0 and goes downward as more lime is necessary.

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