Soil Test Report

Soil Test Report

OrganiCalc for Vegetables - Logan Labs

Report name: **Main Garden** Test Date: 6/13/24 Date saved: 04/19/24

*Email address: alice@growabundant.com

Next crop: Veggies Last crop: Veggies

*Soil test type: Logan Labs Std M3 w/ extras

Soil type: Loamy sand This soil is calcareous: ☐

Target cations: Default (Ca:Mg = 68%:12%)

Logan Labs Std M3 w/ extras Test Report

Sample Location		Main
Sample ID		Garden
Lab Number		
* Sample Depth in Inches		6
* Total Exchange Capacity (M.E.)		13.77
* pH of Soil Sample		7.20
* Organic Matter (%)		4.68
* Sulfur:	ppm	41
Mehlich III as (P2O5)		
* Phosphorus lbs/acre		789
Calcium:	Desired value	
* lbs/acre	Value found	4143
	Deficit	
Magnesium:	Desired value	
* lbs/acre	Value found	548
	Deficit	
Potassium:	Desired value	
* lbs/acre	Value found	287
	Deficit	
* Sodium: lbs/acre		83
* Calcium (60 to 70%)		75.22
* Magnesium (10 to 20%)		16.58
* Potassium (2 to 5%)		2.67
* Sodium (.5 to 3%)		1.32
Other Bases (Variable)		4.20
Exchangable Hydrogen (10 to 15%)		0.00
* Boron (ppm)		0.86
* Iron (ppm)		112
* Manganese (ppm)		68
* Copper (ppm)		3.43
* Zinc (ppm)		17.22
Aluminum (ppm)		150
Cobalt (ppm)		0.70
Molybdenum (ppm)		< 0.02
Selenium (ppm)		0.42
Silicon (ppm)		17
EC mmhos/cm		0.22

(* = required entry)

Alerts

Click switch to override an error message, if present. ☐

[Nitrogen has moved to the next tab]

[Select Area and Depth has moved to the next tab]

Date printed: 4/19/2024

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Choose Area Depth Nitrogen

Enter Area To Be Amended and Select Units:

1000 sq feet

lbs/oz

Select Depth To Mix Amendments

Check all that apply. If all the boxes are unchecked we assume you will mix in the amendments to a depth of 6 inches (15 cm).

- ☐ This soil is in a raised bed or is a potting mix.
- ☑ This is no-till. The amendments cannot be dug in.
- ☐ I want to enter the depth manually.

Choose Target Nitrogen Amount

200 lbs/acre Independent of depth to mix amendments

Best fit compost / nitrogen source for this soilwill have an N - P205 - K2O ratio of 2 - 0 - 3

For advice on target nitrogen amounts, read the article linked below.
https://growabundant.com/how-much-nitrogen-shall-i-add/

☑ **Use the pre-selected nitrogen sources below**

Choose up to 2 Compost/Nitrogen Sources

Source 1 Composted Chicken Manure (3 - 2 - 2)

Or enter your own compost or NPK fertilizer below

Name:

N	P	K	P as P2O5, K as K2O

Source 2 Feather Meal (12-0-0)

Do these amendments supply the target NPK?

Nitrogen?	yes	100%	If P and K are not 100%, OrganiCalc may recommend P and/or K mineral amendments
Phosphorus?	no	0%	
Potassium?	no	0%	

Amendment Recommendations

Amendment Recommendations

Recommendation date: Apr-19-2024

Report name: Main Garden

Test Date: 6/13/24

Recommended Amendments for 1000 sq feet, 6 inches deep	Amt	Units	Notes
Kelp and/or Azomite, combined (for trace minerals)	10	lbs	5
Feather Meal (12-0-0)	38	lbs	4
Potassium Sulfate	14	lbs	
Tiger-90 Elemental Sulfur	6.2	lbs	11
BioMin Copper (4% Cu)	24	fluid oz	10
Borax	8.4	oz	
Sodium Molybdate Dihydrate	1.9	oz	
Total weight of all amendments	70	lbs	

Notes:

	<> A handful or two of vermicompost dug in under transplants can increase yields substantially. Inoculate with mycorrhizae and other beneficial microbes. Apply compost as it is available. Try to get organic matter to 5%; 10% is better, 30% is more than enough. The compost I can make or purchase is best used as mulch. I cover it with a bit of straw to keep it moist and alive, and decaying in place. A one-time or cumulative application of 0.6\" of biochar will improve yields and quality in about 3 years.
4	<> See https://growabundant.com/how-much-nitrogen-shall-i-add for advice on Nitrogen.
5	<> Alternatively, foliar feed Kelp every 2 weeks or as needed to supply trace minerals. Soil applied trace mineral amounts may be reduced after the initial application.
10	<> Alternatively, 4.6 oz of (Blue) Copper Sulfate Pentahydrate, an organic fungicide, may be used.
11	<> The pH adjustment and the Tiger-90 elemental sulfur amendment is optional for this soil. A total of 244 lbs/acre of elemental sulfur will lower the soil pH to 6.8. Sulfur is likely to diminish potassium reserves; retest every 6 months.
20	<> Available silicon has been found to be beneficial to plants. Foliar feed potassium silicate as a mildew preventative (check with your certifier). Soil-applied basalt rock dust has also been shown to supply silicon in low pH, weathered soils.

Additional Comments:

Where to source amendments

https://growabundant.com/where-to-source-amendments/

How to apply amendments

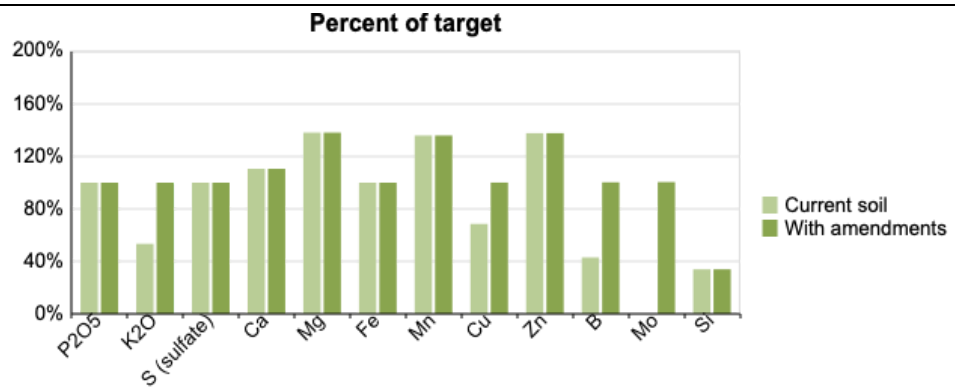
https://growabundant.com/how-to-apply-amendments/

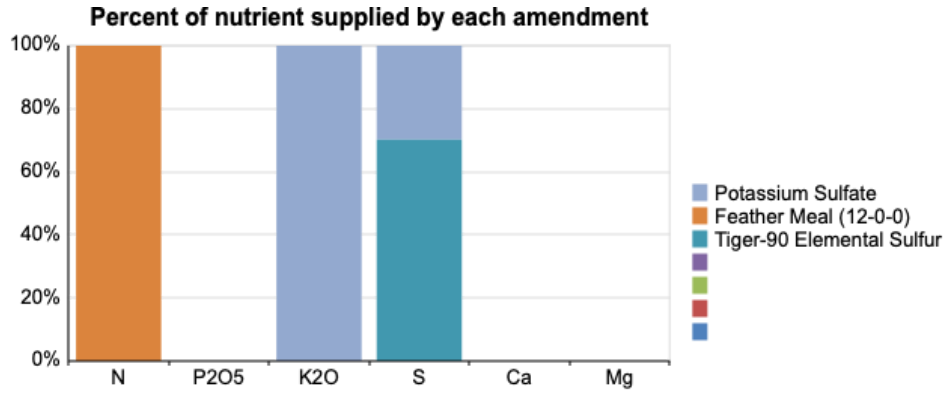
End of Amendment Report Test Date: 6/13/24

Analysis Details

Analysis Details (6" furrow depth)

	Measured (lbs/ac)	Target %	Target (lbs/acre)	Measure-ment percent of target	Applica-tion limit (lbs/ac)	Amount needed (lbs/ac)	Amount to be applied (lbs/ac)	Measured plus amount to be applied (lbs/ac)	How'd we do? % of target this application
N	--		200			200	200		100%
P2O5	789		458	172%	100000	0	0	789	172%
P	345		200	172%	100000	0	0	345	172%
K	287	5.0%	537	53%	100000	250	250	537	100%
K2O	346		647	53%	100000	301	301	647	100%
S (as sulfate)	82		80	102%	100000	0	103	185	232%
S (as elemental)	-		243.729	-	270	244	244	-	100%
Ca	4143	68%	3745	111%	100000	0	0	4143	111%
Mg	548	12%	397	138%	357	0	0	548	138%
Fe	224		156.4	143%	100000	0	0	224	143%
Mn	136		100	136%	100000	0	0	136	136%
Cu	6.9		10	69%	100000	3.1	3.1	10.0	100%
Zn	34.4		25.0	138%	100000	0.0	0.0	34.4	138%
B	1.7		4	43%	100000	2.3	2.3	4.0	100%
Na	83	1.0%	63	131%	100000	0	0	83	
Co	1.40		0.7 to 4.0	100%	100000	0.0	0.0	1.4	100%
Mo	0.00		0.5 to 2.0	0%	100000	2.0	2.0	2.0	100%
Si	34		100	34%	100000	66	0	34	34%



Main Garden

Note: P ranging between 100% and 200% target. has been set to 100% and has been divided in half above 200% target. Fe above 100% has been set to 100%. Sulfur between 100% and 400% target has been set to 100% and has been divided by 4 above 400%.