

Analysis Results (SOIL)

Customer CLIMATE LIGHT LTD
38 CHELWOOD DRIVE
BATH
BA2 2PR

Distributor LANCROP

Sample Ref VEGETABLE GARDEN

Date Received 20/08/2021 (Date Issued: 25/08/2021)

Sample No G028081 / MINO 1

Crop BEANS

Soil Characteristics	Result	Low	Normal	High			
pH	7.8	<div><div></div></div>					
Org. Matter - DUMAS (%)	3.2	<div><div></div></div>					
C.E.C. (meq/100g)	26.1	<div><div></div></div>					
Soil Respiration (mg/kg)	99	<div><div></div></div>					
C:N Ratio	15.4	<div><div></div></div>					
Texture Class	LOSA						
Org. Carbon Stock (t/ha)	36.3	<div><div></div></div>					
Major Nutrients	Result	0	1	2-	2+	3	4+
Phosphorus (ppm)	65	<div><div></div></div>					
Potassium (ppm)	259	<div><div></div></div>					
Magnesium (ppm)	178	<div><div></div></div>					
Secondary and Micro Nutrients	Result	Deficient	Maintenance	High			
Calcium (ppm)	4876	<div><div></div></div>					
Sulphur (ppm)	29	<div><div></div></div>					
Sodium (ppm)	274	<div><div></div></div>					
Boron (ppm)	4.09	<div><div></div></div>					
Copper (ppm)	8.8	<div><div></div></div>					
Iron (ppm)	556	<div><div></div></div>					
Manganese (ppm)	65	<div><div></div></div>					
Molybdenum (ppm)	0.04	<div><div></div></div>					
Zinc (ppm)	30.4	<div><div></div></div>					

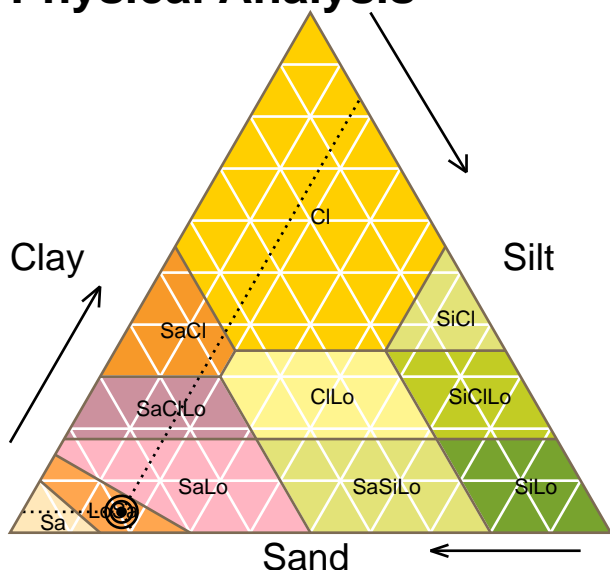
Released by Chris Lindley Laboratory Manager on behalf of Lancrop Laboratories

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Physical Analysis



Analysis	Result (%)
Sand	79.43
Silt	16.56
Clay	4.01
Soil Type	LoSa Loamy Sand

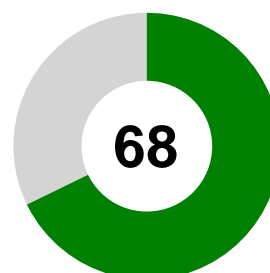
Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis



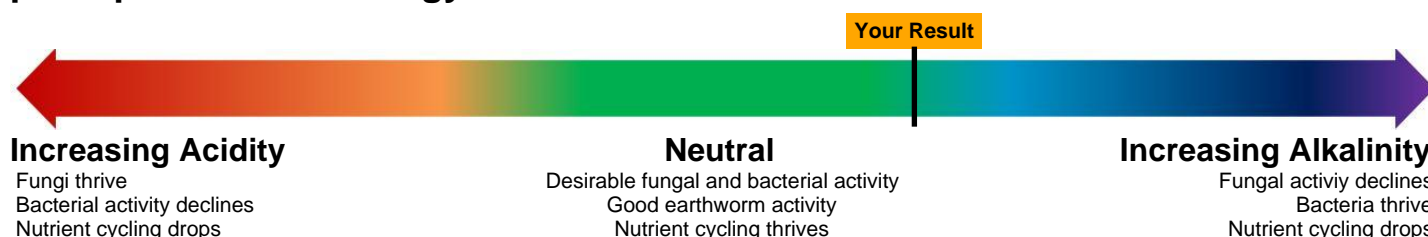
Analysis	Result	Ideal
Solvita Burst CO ₂ -C (ppm)	99	>70
Organic Carbon (%)	1.9	
Total Nitrogen (%)	0.121	
C:N Ratio	15.4	10-12
Calculated Parameters	Result	
Microbial Biomass (mg/kg)	2208	
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	43	
Soil Assessment Score	68/100	

Soil Assessment Score



Microbial Biomass and Potentially Mineralizable N are calculated from the Solvita CO₂-C Burst. The Potentially Mineralizable N assumes ideal conditions. Soil Assessment Score is calculated from biological, chemical and physical results.

pH impact on soil biology



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Analysis	Result	Guideline	Comments
pH	7.8	6.5	High. An alkaline environment will reduce the availability of certain nutrients - particularly P, K, B, Co, Cu, Fe, Mn and Zn. An elevated pH will also impact on beneficial soil fungal populations and activity.
Org. Matter - DUMAS (%)	3.2	3.0	Good. Soils with medium to high levels of organic matter would generally be expected to have a good potential fertility and good structure, moisture retention and water infiltration. Ensure appropriate soil management practices are used to maintain organic matter levels.
C.E.C. (meq/100g)	26.1	15.0	Cation Exchange Capacity indicates a soil with a good nutrient holding ability.
Soil Respiration (mg/kg)	99	70	Typical aerobic microbial activity and mineralisation potential. Soil management practices may further improve biological fertility.
C:N Ratio	15.4	10.0	High. A low C:N ratio in the soil encourages microbial activity and the amount and rate of nutrients made available to the plants through mineralisation. A ratio of 12 - 25 indicates the potential for a slow rate of decomposition of organic residue and a high retention of applied organic materials.
Texture Class	LOSA		
Org. Carbon Stock (t/ha)	36.3	34.0	The calculated level of organic carbon (active + humus) within one hectare when soil bulk density is either assumed (1.3g/cm ³) or has been overwritten with a disturbed soil measured value (if SCA Extra has been requested) and soil depth is 15cm. Please see footnotes for calculation if you wish to adapt. Multiply the OC stock value by the field area (hectares) to indicate level of carbon stored within the field.
Phosphorus (ppm)	65	26	(Index 4.8) Possible interference with availability of Fe,Cu,Zn.
Potassium (ppm)	259	241	(Index 3.1) Adequate level. Use soil analysis every 3-5 years to ensure level is maintained.
Magnesium (ppm)	178	50	(Index 4.0) Adequate level.
Calcium (ppm)	4876	1600	Adequate level.
Sulphur (ppm)	29	10	Adequate level.
Sodium (ppm)	274	90	Normal level.
Boron (ppm)	4.09	1.60	High level.
Copper (ppm)	8.8	2.1	Adequate level.

Wellington Road, The Industrial Estate
Pocklington, York, YO42 1DN
Tel: + 44 1759 305116 www.lancrop.com

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Crop	BEANS		

Analysis	Result	Guideline	Comments
Iron (ppm)	556	50	Adequate level.
Manganese (ppm)	65	110	PRIORITY FOR TREATMENT.
Molybdenum (ppm)	0.04	0.20	PRIORITY FOR TREATMENT.
Zinc (ppm)	30.4	2.1	Possible interference with the availability of Iron.

Additional Comments

Where applicable soil applied P,K and pH recommendations are taken from AHDB Nutrient Management Guide (RB209)

Any indicated Lime Requirement assumes a medium textured soil.

Additional technical bulletins are available at www.lancrop.com.

Please Note

Whilst every care is taken to ensure that the Results from Analysis are as accurate as possible, it is important to note that the analysis relates to the sample received by the laboratory, and is representative only of that sample. No warranty is given by the laboratory that the Results from Analysis relates to any part of a field or growing area not covered by the sample received. It is important to ensure that any soil, leaf, silage or fruitlet sample sent for analysis is representative of the area requiring analysis and that samples are obtained in accordance with established sampling techniques. A leaflet containing instructions on how to take soil, leaf, herbage, silage and fruit samples for analysis is available from the laboratory on request. Uncertainty measurements of results are available on request