

RHYS EDWARDS

0
0
0

0
0



Solutions for Eco-nomically Sustainable Farming

SSM Soil Advisor **Ian Robertson** 07970 286420
Facts Fertiliser Advisor **Ian Robertson** 01653/12

Sample No: Q23800
LAB No: 92872
Sample DATE: 02/03/2020
Report DATE: 29/06/2020

Field ID:	PURPLE 3	1 Ha	CROP SOWN:	No Crop Given
-----------	----------	------	------------	---------------

pH & CEC	A Restricted soil structure (Bd)		Soil test is assumed to be carried out for soil at		General plough depth	
	Active pH	6.10	Total Exchangeable Capacity (TEC)	6 = small, 30 = large. 15 viewed as average	Result	11.30
	A slightly acidic soil. Good crop responses.					
	Buffer pH	6.70	Priority; consider liming.		0	0
OM	Active Carbon	2-3%	1.61	Stone content % if known		
	Organic Matter	Min >3%	10.20	Dry BD 0.861		
	Organic Carbon	ideal >5%	5.99	Field Bulk density if known		
	Min required OM for structural integrity		3	Estimated NR 120 kg of NR from OM		
			T/C/ha Target		98	Found 117 T/C/ha

Cation Summary	Soil management recommendations		Foliar management recommendations	
	consider crop specific (pH) and granulated lime		Foliar phosphate responsive (Molybdenum in Brassicae and pulses)	
	Question crop peak demands - 369.6 kg/ha K2O Found		apply foliar Magnesium	
	0.0 kg/ha recommended - Apply solubilising bacteria		Foliar apply sulphur if High N applications or sandy soil	
	Ensure Crop requirement Applied			

Base Cation Saturation figures	Reported as kilograms/hectare - elemental (kg/ha)		CROP AVAILABLE NUTRIENTS		TOTAL IN SOIL RESERVES		% Base Cation Saturation Ratios (BCSR)		
	Major Elements in Elemental form	kg/ha DESIRED	kg/ha Found	Difference	ELEMENTAL kg/ha	DESIRED	FOUND		
	Calcium	3005	3051	46	6151	68.20	69.25		
	Magnesium	312	206	-106	2743	11.80	7.80		
	Potassium	312	308	-4	1536	3.63	3.59		
	Sodium	45	34	-11	108	0.89	0.67		
	Other elements	7%	3.70		Minor Importance	7.48	3.70		
	Hydrogen	8%				8	15		
	Sulphate (S03)	91	71.34	-19	1026	Excessive Total P reserves for the soils holding capacity			
	Phosphate (P205)	130	113	-17	2321				
General comment on Calcium		The calcium is 'root available' but review the result in conjunction with desired BCSR level.							

Cation Ratios	RATIOS : 1		Target level	Found	Structural comments	Plant health comments
	Calcium	Ca : Mg	5.78	8.9	Ideal bulk soil structure	Magnesium is low.
	Magnesium	Mg : K	3.25	2.17	Soil should be workable.	Increase solution magnesium.
	Potassium	K : Mg	1.00	1.49	consider foliar Mg	Potash should be increased.
Sodium	Electrical Conductivity & Total Desolvable Salts		Sodium Adsorption Ratio	CROSS Ratio of Stability	Estimated Sodium Potential (ESP)	Na : K
	EC/TDS		Guide <4	Totals <3	Guide result <6	ratio OK
	N/A		0.11	1.28	0.67	
			Available <0.5	0.47	Potential dispersible soil surface in rain.	

Biology	Phosphorus	1.95	% 5-8	Apply soil biology - (phosphate solubilising bacteria)	Biological Treatment
	C:P ratio	50.3	40to1	maintain humus	Yes Required
	pH	6.10		A good biological environment.	crop dependant
	Organic Carbon	5.99%		Maintain Carbon Levels with Organic matter	Aim for soil carbon to be above 5%

Trace Elements	Predicted availability of trace elements			Found	Guides	Soil Treatments	Foliar treatment
	Boron	B	mg/l	0.70	1.2-2.4	Apply Granular Boron	High Boron demanding crops only
	Iron	Fe	mg/l	449.00	18 - 189	Apply products that create new roots	
	Manganese	Mn	mg/l	27.00	18 - 70		
	Copper	Cu	mg/l	2.10	2.5 - 7	consider soil copper	YES
	Zinc	Zn	mg/l	21.80	4 - 10.		
	Chlorine	Cl	mg/l	22.00	9-20.		
	Iodine	I	mg/l	0.00	1		
	Molybdenum	Mo	mg/l	0.50	0.5-0.7	N/A	Brassicae/pulse/ clover respond to Mo
	Cobalt	Co	mg/l	0.00	0.5-2.	not reported	

Index Figures	Standard UK index to ISO/IEC 17025-2005			Morgan / Reams		Modified Morgan	
	mg/l	Index	Buffer pH	6.7	Index	Mg/l	mg/l
	21.8	2	Phosphorus	0	0	0	0
	124	2-	Potassium	0	0	0	0
	78.9	2	Magnesium	0	0	0	0
	UK phosphate is via the Olsen method		Calcium	0	0	0	0
1.6	standard UK K:Mg Ratio OK	Organic Matter	10.2		0		
Standard testing method for Southern Ireland				Standard testing method for Europe			

This report is based on the soil sample as received, and labeled by the sender. The company will not be responsible for any errors in sampling or labelling.