



Bio Services

SOIL TESTING LABORATORY

REAMS SOIL TEST REPORT

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SAMPLE SUBMITTED BY	GROWER	CROP	Total Ha	REPORT DATE
Bruce Staples		Food Forest		08.07.15

Reams Plant availability	Nitrate N		Ammon.N		Calcium		Magnesium		Phosphorus		Potassium		Sodium		pH		ORP		ERGS		Para-magnetism		Humus		Ca:Mg		P:K		Total Daily	
	Ha	NO3	NH4	Ca	Mg	P	P2O5	K	Na	log[H]	mV	uS/cm	Rating	Ratio *	Ratio *	Rating	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Ratio *	Nutrients**	
Desired ranges/levels	kg/ha	40-80	40-80	2000-5000	280-800	100-200	200-400	100-200	20-70	6.2-6.9	25-18	200-600	30-40	7 to 1	7 to 1	30-40	7 to 1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2:1 or 1:1	2900		
Food Forest-Quarter Arce		17	7	1121	183	22	52	336	33	7.19	32	149.2	24	6.1	0.2	24	6.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1532		

Guidelines for interpreting your results are listed below (also refer to www.ef.net.nz/soil-testing)

- Low ammonium-N levels indicate low bacterial activity and nutrient cycling
- Low calcium indicates low reserve energy, weak cell wall strength, fruit bruising, increased insect attack, sour fruit
- Low phosphorus means low P:K ratio, low yields, weed problems. Mycorrhizal fungi require P of 45-160kg/ha to function
- High potassium replaces Ca in plant cells, resulting in low-nutrient foliage
- A high Na soil can cause compaction
- Oxidation Reduction Potential (ORP) is an indicator of organic matter breakdown
- Energy Released per Gram per Second (ERGS) is a measure of soil energy. Low ERGS means low energy, poor growth and yields
- Para-magnetism measurement of magnetic force that is important for root growth
- Low Humus Rating indicates low microbial activity, nutrient cycling, water holding capacity and increased drought prone
- Ca:Mg ratio less than 7:1 indicates compacted, poorly aerated soils
- P:K ratio of 2:1 for pasture and 1:1 for other crops. good ratio discourages broadleaf weeds, increases leaf vigour and brix
- **Total Daily Nutrients: combined availability of nitrate-N, ammonium-N, Ca, Phosphate & K.

A report and fertiliser recommendation can be requested by the submitter and/or grower

Disclaimer - Bio Services Ltd provides this report in good faith and will not be held responsible for the interpretation of and recommendations from these results by a third party.