

BASIC VS AGRISEA SOIL TESTING

Basic Soil Test with Sulphur Profile

Cost = \$92 excl GST

What it does:

Measures the “bare minimum” — pH, the major cations (Ca, Mg, K, Na), CEC, Total Base Saturation, Olsen P, and Sulphur Profile (sulphate sulphur and extractable organic sulphur).

Mindset behind it:

It assumes that soil is just a bucket to hold fertiliser. The focus is on soluble nutrients, particularly phosphorus (Olsen P), sulphur (Sulphate S) and quick chemical fixes.

What it misses:

- Doesn't measure the biological engine of the soil — organic matter, microbial activity, or carbon.
- Ignores total nutrient reserves and most micronutrients (e.g., zinc, copper, manganese, boron), which are critical for plant and animal health.

Bottom line:

It gives farmers a snapshot of what's soluble right now, but not what's locked up, nor how a functioning soil biome could make those reserves available. This can lead to overuse of synthetic fertiliser and nutrient leaching.

AgriSea Essentials Soil Analysis

Cost = \$224.10 excl GST
Includes AgriSea 10% off special

What it adds:

- Resin P & Anion Storage Capacity (ASC):** Shows both available phosphorus and how well your soil can retain it — crucial for reducing leaching and runoff.
- Hot Water Extractable Carbon:** A measure of the biologically active fraction of soil carbon which is a good indication of soil biological health.
- Boron:** A key nutrient for movement and utilisation of calcium in plants and also the connection between plants and the soil biome.
- Organic Matter, Total Carbon, C:N Ratio:** Indicators of long-term fertility and resilience.
- Potentially Mineralisable Nitrogen (PMN):** How much N your soil biome can cycle naturally, reducing the need for synthetic N inputs.

When to do it:

The AgriSea Essentials Soil Analysis is recommended for farmers who have measured their Total P and S within the past 5 years and are wanting to make decisions based on more than just the 'chemical composition' of the soil.

Why it matters for today's farmers:

- Shifts focus from “dumping nutrients in” to understanding nutrient cycling.
- Carbon, organic matter, and PMN tell us how alive your soil is — the key to resilient, cost-effective farming.
- Starts to identify hidden deficiencies and inefficiencies that basic testing ignores.

AgriSea Full Spectrum Soil Analysis (Gold Standard)

Cost = \$317.70 excl GST
Includes Full Mehlich 3 Trace Elements, Boron and AgriSea 10% off special

What it adds:

Everything in Essentials, PLUS:

- Reserve Potassium (TBK), Total Phosphorus & Total Sulphur:** The nutrient reserves that basic tests ignore. A healthy soil biome can unlock these, meaning you often have more fertility than you've been told.
- Full Mehlich 3 Trace Elements:** A complete micronutrient suite. Micronutrients are tiny in quantity but massive in impact — driving enzyme function, plant immunity, and animal health. (Not recommended if pasture samples are being taken)
- Aluminium:** Where soil pH is less than 6, Al in the soil becomes more soluble and can restrict root growth, thus reducing water access, gas exchange and nutrient uptake by plants.

When to do it:

The AgriSea Full Spectrum Analysis is recommended for any operation that has not measured their Total P and S in the past 5 years or for farmers wanting to baseline their operation before making any adjustments.

Why it matters for today's farming:

- Provides the full picture of soil fertility and functionality.
- By understanding both what's soluble now and what's locked away, you can farm in partnership with your soil biome instead of chasing fertiliser trucks.
- Reduces reliance on synthetic inputs by highlighting how much your soil can supply naturally if the biome is supported (e.g., with AgriSea biostimulants).

Why the AgriSea Tests are Better.

Biological focus: They don't just measure chemistry; they measure the life and resilience in your soil.

Nutrient cycling: Instead of assuming fertiliser is the answer, they show how much your soil can provide when the biome is functioning properly and not suppressed by heavy chemical inputs.

Micronutrient health: Trace elements are often the missing link in pasture and animal performance. Conventional tests miss them — AgriSea doesn't.

Long-term thinking: They allow you to build soil fertility naturally, regenerate carbon, and reduce environmental losses.

Saves you money: by getting the full picture you can make more informed decisions when it comes to your nutrient management, often reducing wastage and improving efficiencies.

We dig deeper: our tests are done at 150mm, not 75mm. Along with making sure the right tests are performed, we have to make sure the right soil is tested. By taking 150mm samples, we ensure that a more accurate representation of the active root zone is gathered.

THE WAVE

AgriSea Newsletter Spring 2025

Science-Backed Success: Why Farmers Trust AgriSea

For 29 years, Kiwi farmers have been putting their trust in AgriSea to deliver results—across soils, pastures, crops, and livestock. Our products aren't just another input; they're part of a proven system that drives on-farm productivity and long-term resilience.

At AgriSea, we're committed to more than just high yields—we're investing in the science that explains why our products work. That's why we've published peer-reviewed papers on our Animal and Fortress Ranges, along with evidence on our Soil and Foliar Nutrition for kiwifruit production.

Now, hot off the press, comes the latest in our research suite: compelling evidence showing the remarkable benefits to grazing animals on pastures treated with AgriSea Biostimulants.

Don't be fooled by cheap imitations. Not all seaweeds are created equal. AgriSea's proprietary fermentation process unlocks the rich bioactive compounds that make the difference—and it's the only seaweed product range trusted by both farmers and science.

Real results. Evidence backed. Proven by farmers. That's the AgriSea difference.

Growth Performance

Parameter	AgriSea Rye + Clover	Control Rye + Clover	% Change
Ewe ADWG (Lambing → Weaning)	89.1 g/day	16.5 g/day	+440%
Lamb ADWG (Lambing → Weaning)	384.9 g/day	324.7 g/day	+18.5%
Lamb ADWG (Weaning → Finishing)	188.4 g/day	186.5 g/day	Minimal
Ewe NEFA (mmol/L) Negative Energy	0.69	1.14	↓39%

Key insights:

- Seaweed dramatically improved ewe growth and recovery, with 440% higher ADWG.
- Lambs grew 18.5% faster pre-weaning, driven by better ewe milk production and pasture quality.
- Benefits were strongest before weaning; growth differences narrowed post-weaning.

Milk Quality Improvements

Milk Trait	AgriSea Rye + Clover	Control Rye + Clover	% Change
Omega-6 Fatty Acids	4.25 mg/g	3.85 mg/g	+10.4%
Medium-Chain Fats (C10:0)	43.81 mg/g	37.22 mg/g	+17.7%
Total Saturated Fats	349.26 mg/g	305.95 mg/g	+14.1%

Benefits:

- Higher omega-6 and medium-chain fatty acids improve milk energy density and nutritional value.
- Lambs received richer, higher-quality milk, supporting faster early growth.

The research was carried out from September 2022 to March 2023 on a 10-hectare plot of Lincoln University Johnstone Memorial Laboratory Sheep Farm.

Before starting the experiment, all pasture paddocks received a basal fertiliser mixture (diammonium phosphate, sulphur, urea). Each paddock (0.75 to 1.5 ha) was then split in half: one half received AgriSea biostimulant treatments, while the other half remained untreated as a control.

The biostimulants (SOIL Nutrition,

PASTURE Nutrition and OCEAN Nutrition) were applied three times during the experimental period (October 2022, December 2022, and February 2023).

The benefits to animal performance over this **Spring and Summer period** exceeded expectations across pasture types.

We look forward to sharing further papers from this work in the next 12 months including for the first time - New Zealand Farming evidence of the Soil -Plant- Animal- Human health link.

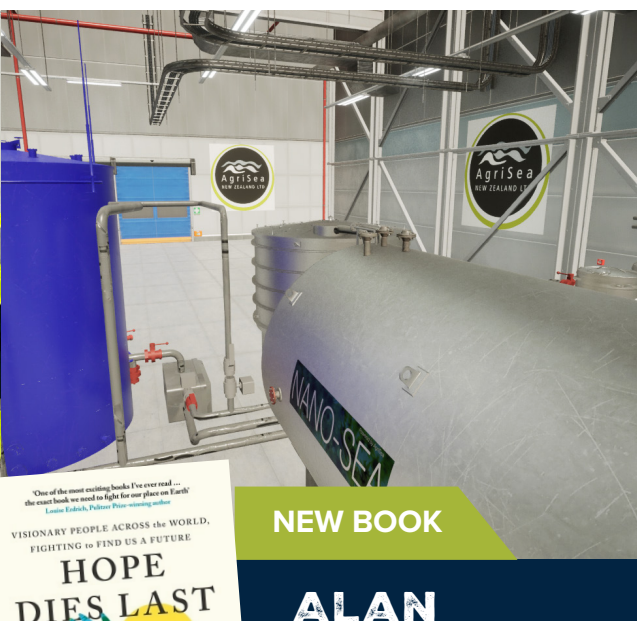
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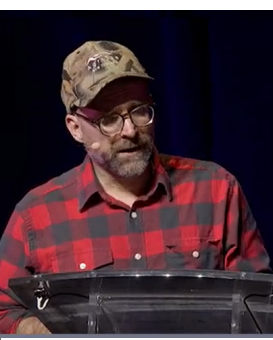


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Turning Science Into Solutions: NZ's Bioeconomy Gains Momentum

Key government leaders and science innovators came together recently to celebrate the momentum building within New Zealand's growing bioeconomy sector.

- **Hon Dr Shane Reti** - Minister for Health, Minister for Science, Innovation and Technology, Minister for Pacific Peoples, and Associate Minister of Education
- **Hon Scott Simpson** - Minister of Commerce and Consumer Affairs, Minister of ACC.
- **Mark Piper** - CEO of New Zealand Institute for Bioeconomy Science Limited
- **Dr Stefan Hill** - Portfolio Leader, High Value Biorefineries (New Zealand Institute for Bioeconomy Science Limited - Scion Group)

We were energised by the real action and collaboration already underway with the recent merger of the "Fantastic Four of the Bioeconomy": AgResearch, Manaaki Whenua - Landcare Research Group, Scion Group and The New Zealand Institute for Plant and Food Research Limited. Throughout our conversations we realised this merger, isn't

just about a structural change; this is a mindset shift - it's about transformational science to support our primary industries.

We also had the ability to showcase how AgriSea, in partnership with Scion, is advancing innovation, through our 7 year project to scale a Seaweed Nanocellulose Biorefinery from the by-products of our seaweed production.

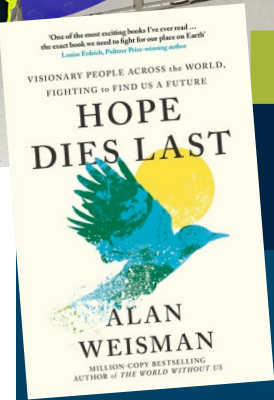
We are only a month away from sending out our first commercial orders from New Zealand as we turn would-be waste streams into high value.

This technology allows us to: Support other seaweed companies maximise value from material

Solve product challenges with our high performance platform cellulose with current projects spanning:

Biological Encapsulation, Wound Healing, Medical Devices, Filtration, Cosmetic, Batteries and Electronics, Plant and Food applications

This is circular bioeconomy in action - turning science into sustainable, commercial solutions that deliver for land, people, and the future with global impact.



NEW BOOK

ALAN WEISMAN'S

New York best selling author

We are honoured that our journey is featured in Alan Weisman's new book Hope Dies Last: Visionary People Across the World, Fighting to Find Us a Future.

At AgriSea, we've long believed in the power of nature based regenerative solutions - practices that reinvigorate soils, support farmers, and honour shared learnings. Being part of this book reaffirms our commitment to sustainable solutions that uplift both people and ecosystems.

Within the book it showcases the meaningful extension of our work and the collaboration with US based GreenWave, a not for profit working to replicate and scale regenerative ocean farming.

Together, we're adapting AgriSea's fermentation methods, originally developed for our New Zealand seaweed species to Sugar kelp cultivated by seaweed farmers in North America.

This partnership bridges land and sea, opening new markets and creating shared value from the ocean to the land.

For anyone passionate about environmental innovation, regenerative agriculture, or indigenous-led climate resilience, Hope Dies Last offers powerful inspiration—and highlights stories like ours where collaboration alongside action not only brings hope but is hope alongside action

From Sea to Table: A Vision of Zero-Input Ocean Farming

At this year's **Evoke Ag event in Australia**, thought leaders Clare Bradley and Bren Smith went to Australia to explore the future of food and farming. Among the standout conversations was Bren's bold vision for how the ocean could become our next great agricultural frontier.

Imagine a world where food grows silently beneath the waves—no fields to till, no fertilisers, no freshwater, just the ocean's vast, natural bounty. In Open-source 3D Ocean Farming: A Blueprint to Feed the World, Bren introduces a pioneering idea: underwater vertical farms that need none of the traditional inputs of land agriculture.

Picture a simple scaffolding: ropes anchored below, supporting seaweeds, mussels, and clams in a delicate dance with the sea. This **3D ocean farming** method requires **no feed, no fertilisers, no fresh water, and no land**—only sunlight and the ocean itself. It's farming that "disappears" into the water, invisible from the surface, yet abundant in its yield.

Why does it matter? Because this isn't a niche project—it's a scalable solution. Farms like these could stretch across coastlines, restoring marine ecosystems while feeding communities globally. This is nature's design: restorative, regenerative, and refreshingly simple. As water scarcity and climate pressures mount, the sea might just hold the answers to our food future.

Nick's Spring Update

Hi Everyone,

Firstly, a big thanks to all our existing clients across Hawke's Bay, Wellington, Manawatu, and Gisborne for their warm welcome. It's been fantastic getting around the regions, seeing your systems in action, and working alongside you to get the most out of AgriSea. I've also enjoyed introducing new clients to how AgriSea can fit within conventional systems to improve effectiveness and create cost savings.

Over the past few months, a strong theme in conversations has been animal health, particularly around drench resistance and preparation for facial eczema. Many clients — both new and longstanding — are focused on building immunity and resilience within their herds. It's encouraging to see AgriSea Animal Nutrition products supporting these goals. AgriSea provides bioavailable trace elements, vitamins, and amino acids that strengthen natural immunity and support liver function, both critical for managing parasite pressure and reducing the impact of facial eczema. By nourishing rumen microbes and improving gut health, animals can make better use of their feed, enhancing resilience during high-risk periods and helping to reduce reliance on synthetic drenches.

It's also been exciting to connect with new equine clients in Wellington with the competition season fast approaching. Horses are being clipped and brought up to competition fitness, and it's a crucial time to ensure they receive the right balance of vitamins, minerals, and trace elements to maintain health and performance for the season ahead.

I've noticed the ongoing pressures in viticulture, including declining domestic wine consumption, export market volatility, rising costs, climate

impacts, and labor and infrastructure challenges. Similarly, in the sheep and beef sector, while current payouts are encouraging, many are still catching up on deferred maintenance after years of average returns. In both cases, it's reassuring to know that AgriSea products can be adapted to suit different situations, supporting farmers and growers to keep their systems progressing through challenging periods.

A personal highlight recently was attending the REXI Conference with Darren J. Doherty at Mangarara Station. A big thanks to Greg and Rachel Hart for their hospitality. The course offered an insightful look at regenerative farm planning, with a strong emphasis on agroforestry as a way to combat drought and provide forage for stock.

On the home front, I've been busy in the calf-rearing shed before and after work, using AgriSea Animal Nutrition for the first time in my rearing system and following the calf program. I've already noticed fewer transitional scours when shifting calves from whole milk to milk replacer, along with quicker recovery in down calves. The ease of use - with no withholding periods and no risk of overdosing, has been a real advantage.

It's great to see some warmer weather on the horizon. Thanks again to all of you, I look forward to continuing the journey together and wish you all the best for the start of spring.

Take care, *Nick*

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Savings breakdown

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Buy 1x 100L = \$50 OFF per drum	Buy 1x 1000L = \$500 OFF per pod

Buy more, save more

The more you buy, the more you save

Buy 2x or more 20L = \$40 OFF Per container	Buy 2x or more 200L = \$200 OFF Per drum
Buy 2x or more 100L = \$100 OFF Per drum	Buy 2x or more 1000L = \$1000 OFF Per pod

Soil+ and Combo+ Specials

Buy 1 tonne = \$300 OFF Buy 1/2 tonne = \$100 OFF
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Special is only on seaweed liquid products and excludes Ocean Nutrition.



Future of the whenua Māori Primary Sector Panel



Dr Tanira Kingi



Hon Todd McClay



Nanaia Mahuta



Te Arawa Arataua Agribusiness Summit

The summit featured a strong line-up of speakers, including Hon Todd McClay, Nanaia Mahuta, Dr Tanira Kingi, and Clare Bradley, with Stacey Morrison as MC.

Te Arawa Arataua represents over 30,000 ha of Māori-owned land, focused on new opportunities, optimising returns, and tackling challenges like freshwater management and climate change, while supporting hapū and iwi development.

Clare's kōrero reinforced the need for collaboration, innovation, and sustainability—values that mirror AgriSea's commitment to caring for whenua and wai, and building resilience for future generations.

Thank you to Dr Tanira Kingi and the Te Arawa Arataua team for their warm hosting and support.

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