





# Unlock your plant's potential with our diverse range of liquid fertilisers, soil conditioners, and nutrients.

Whether you seek robust pasture growth or need to address covered. Achieve solid pasture and crop growth with our top quality solutions.

# USING UAN LIQUID NITROGEN PRODUCTS:

Our UAN (Urea Ammonium Nitrate) is a liquid mixture comprising of urea and ammonium nitrate with added Sulphur. It takes the form of a smooth-flowing liquid containing nitrogen and sulphur (ammo) without any lumps.

This UAN solution contains 32% nitrogen and 4% sulphur by volume, combined with a seaweed or humic base. Notably, 50% of the nitrogen is readily accessible through foliar absorption.

The sustained growth results from the urea component, which transforms into nitrate through soil processes. This dual nitrogen source offers the ideal combination for continuous grass growth. Dissolved urea, in contrast, works more slowly than UAN because it is not in nitrate form.

Research findings on UAN formulations indicate that applying 15 litres of NS32, Springboard, or similar products per hectare will yield as much dry matter as 65 kilograms of granular urea per hectare over a 30-day period. This application is recommended for pastures or crops, with a minimum water ratio of 1:8.

When you apply AgriFert NS32 or Springboard at a rate of 15 litres per hectare, you're providing 5 units of nitrogen per hectare, whereas 65 kilograms of urea, granulated supplies

Using UAN as a nitrogen source, especially in cold weather, offers the advantage of covering more hectares per load when using Tow and Fert or spray equipment. This not only saves time but also translates into cost savings.

CLEVER by NATURE





# NOURISHMENT & GROWTH WITH THF POWER OF OCEAN & SYNTHETICS



Our advanced liquid fertiliser, formulated with a blend of synthetic nitrogen and sulphur, and enriched with the natural benefits of activated kelp extracts.

#### FEATURES:

#### PACKAGING: 20L | 200L | Bulk

- Supplies essential nutrients
- Enhances plant growth and health
- Increases resistance to stress

USAGE: Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

S 0 4.7 32.4 0



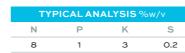


A seaweed based fertiliser that is fortified with nitrogen and rich in micronutrients. hormones and amino acids. Extra boron supports cell wall formation and structural integrity.

#### FEATURES:

- Complex micronutrients & compounds
- Boosted with N and Boron
- Enhances plant and soil health

**USAGE:** Best to spray early in the morning or later in the day to avoid hot





PACKAGING:

20L | 200L | Bulk

and direct sunlight.





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Maximise the potential of your pasture and crops with our advanced liquid fertiliser - a perfect blend of synthetic nitrogen and sulphur plus fulvic acid and humic acid extracts.

#### FEATURES:

- Increases nutrient uptake
- Enhances root development
- Reduces nitrogen use and leaching

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

TYPICAL ANALYSIS %w/v				
N	Р	К	S	
32	0	0	4	

PACKAGING: 20L | 200L | Bulk





High-quality sulphur fertiliser for use in plant growth to manage nutrient delivery at times when sulphur levels in the soil may be impacted.

#### FEATURES:

- Essential to life
- Increase quality, improved yield
- Sulphur aids nitrogen-fixing bacteria

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

TYPICAL ANALYSIS %w/v				
Ν	Р	К	S	
0	0	0	17	

PACKAGING: 20L | 200L | Bulk





A seaweed and fish based fertiliser that is fortified with nitrogen, macro and micronutrients, hormones and amino acids. Promotes excellent growth year round.

#### FEATURES:

- Faster growth, improved yield
- Stimulates microbial activity in soil
- Reduces nitrogen use and leaching

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

TYPICAL ANALYSIS %w/v				
Ν	Р	К	S	
10.4	3.7	7.8	1.3	



A premium fertiliser for viticulturalists and horticulturalists to manage nutrient delivery, at a time when nitrogen impact on leaf growth and fruit quality is less than desirable.

#### FEATURES:

- Low N from organic base
- Faster growth, improved yield
- Stimulates microbial activity in soil

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.



Ν	Р	K	S
0.9	4.2	8.9	1.9

# Agrifert MARINE<sup>®</sup> ORGANIC

A high-quality organic fertiliser made using a combination of fish emulsion and seaweed to provide essential nutrients to crops and plants.

#### FEATURES:

- BioGro certified input for organics
- Environmentally friendly
- Balanced nutrition and soil health

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.





A seaweed based fertiliser rich in micronutrients, hormones and amino acids plus extra potassium for plant growth and stress resistance

### FEATURES:

PACKAGING:

1L | 20L | 200L | Bulk

Adrifer

PACKAGING:

Agrifert

PACKAGING:

AgriFERT

Liauic

1L | 200L | Bulk

20L | 200L | Bulk

- Complex micronutrients & compounds
- Potassium essential for plant growth
- Enhances plant and soil health

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

#### TYPICAL ANALYSIS %w/v Ν P Κ 4.4 7.9 14



A seaweed based fertiliser rich in micronutrients, hormones and amino acids. Extra potassium and phosphorus for plant growth, stress resistance, root development, flower and fruit growth.

#### FEATURES:

- Complex micronutrients & compounds
- Added benefits of P & K
- Enhances plant and soil health

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

#### TYPICAL ANALYSIS

к N 0 7.9 14.1



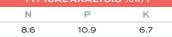
A seaweed based fertiliser that is fortified with nitrogen and rich in micronutrients, hormones and amino acids. Extra potassium and phosphorus for stress resistance and root development.

#### FEATURES:

- Complex micronutrients & compounds
- Phosphorus essential for root growth
- Enhances plant and soil health

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

#### TYPICAL ANALYSIS %w/v



# 20L | 200L | Bulk

PACKAGING:



PACKAGING:

20L | 200L | Bulk

AgriFERT

PACKAGING:

20L | 200L | Bulk

Agrifert

# LIQUID FERTILISERS



# LIQUID HUMIC & FULVIC TO STIMULATE ROOTS & HEALTHY GROWTH



A liquid Humic and Fulvic based soil conditioner and foliar biostimulant for soil and plant health and nutrient uptake with magnesium which is essential for photosynthesis.

#### FEATURES:

#### PACKAGING: 20L | 200L | Bulk

- Soil conditioner with biostimulants
- Supports nutrient uptake Highly concentrated

and direct sunlight.

**USAGE:** Best to spray early in the morning or later in the day to avoid hot

Mg S 0 0 0 0 2





A liquid Humic and Fulvic based soil conditioner and foliar biostimulant for soil and plant health and nutrient uptake with potassium for plant growth and stress resistance.

#### FEATURES:

- Soil conditioner with biostimulants
- Supports nutrient uptake
- Highly concentrated

**USAGE:** Best to spray early in the morning or later in the day to avoid hot













A liquid Humic and Fulvic based soil conditioner and foliar biostimulant for soil and plant health and nutrient uptake.

#### FEATURES:

Ν

- Soil conditioner with biostimulants
- Supports nutrient uptake
- Highly concentrated

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

TYPICAL ANALYSIS %w/v



5





Κ

S



A liquid Humic and Fulvic based soil conditioner and foliar biostimulant for soil and plant health and nutrient uptake plus iron for deep green leaf colour.

#### FEATURES:

- Soil conditioner with biostimulants
- Supports nutrient uptake
- Highly concentrated

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

т	YPICAL	ANALY	SIS %w,	/v
Ν	Р	К	S	Fe
0	0	0	0	2

PACKAGING: 200L | Bulk





A liquid Humic and Fulvic based soil conditioner and foliar biostimulant with seaweed that is rich in micronutrients. hormones, and amino acids to improve plant growth.

#### FEATURES:

- Soil conditioner with biostimulants
- Supports nutrient uptake
- Highly concentrated

**USAGE:** Best to spray early in the morning or later in the day to avoid hot and direct sunlight.

TYPICAL ANALYSIS %w/v					
Ν	Р	K	S		
0	0	0	0		

PACKAGING: 20L | 200L | Bulk



# TRIAL REPORT:

EVALUATION OF THE IMPACT OF AGRIFERT®NS32" WITH GIBBERELLIC ACID (GA) AGAINST TRADITIONAL NITROGEN SOURCES WITH GA ON PASTURE YIELD IN COOL CLIMATE CONDITIONS, FOCUSING ON NITROGEN UTILISATION UNITS.

## **BACKGROUND INFORMATION:**

Gibberellic acid, when used in combination with nitrogen fertilisers, is reported to significantly enhance the growth of plants, even in cooler climates. Studies have shown that the application of nitrogen and gibberellic acid together can increase seedling emergence, length, fresh weight, and dry weight in plants

### PURPOSE OF THE STUDY:

The study aimed to show that enhancing early spring pasture growth is feasible using foliar fertilisers like Agrifert® NS32<sup>™</sup> combined with gibberellic acid and other dissolved fertiliser solutions. This approach seeks to support pasture development without relying heavily on extensive nitrogen applications to boost growth after winter

### **RESEARCH OBJECTIVES AND HYPOTHESES:**

- Report pasture growth response rate to GA and a range of fertilisers when applied in early spring in cooler climates
- Report the use of N in each application
- Calculate the total economic cost and cost per Kg/DM for each application
- Understand the GHG emission profile of each application and how this might support farmers in reducing their profile to support Fonterra's goal of reducing on-farm footprint by 30% until 2030

## LITERATURE REVIEW:

A DairyNZ study, conducted at Lincoln University in New Zealand, investigated the potential of gibberellic acid (GA) as a supplement to nitrogen in pasture growth. The study found that GA, while beneficial for early spring growth, is not a complete substitute for nitrogen. Its use needs to be carefully managed to avoid nitrogen deficiency in pastures, as seen from the trial's outcomes. This research emphasises the balanced application of GA and nitrogen to maximise pasture yield without compromising pasture health.

For more info: https://www.dairynz.co.nz/feed/fertiliser/gibberellic-acid/

## **GRASS GROWTH PHOTOS**

**SNAPSHOT** 

AT 22 DAYS:

**OF FINDINGS** 

### Trial site prior to application - 19 September 2023



- Forage Efficiency (DM Growth): Agrifert<sup>®</sup> NS32<sup>™</sup> with GA grew 2,378Kg/DM/Ha at 22 days.
- Nitrogen Application: A total 4.8Kg of N per Ha was applied, a 75% reduction compared to all other treatments.
- Comparison to Alternatives: 80Kg/Ha of SOA with GA and 50Kg/Ha of Dissolved Urea with GA produced similar DM/Ha to Agrifert<sup>®</sup>NS32<sup>™</sup> with GA but
- with much higher N. • GHG Emissions: A total of 47Kg/

or \$0.021c per Kg/DM for NS32<sup>™</sup> with GA. This was 16% less than

50Kg of Dissolved Urea.

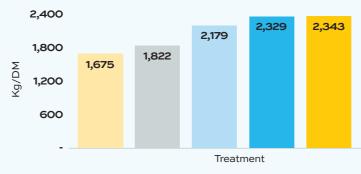
CO<sub>2</sub> emissions/Ha was calculated

ASSESSMENTS The

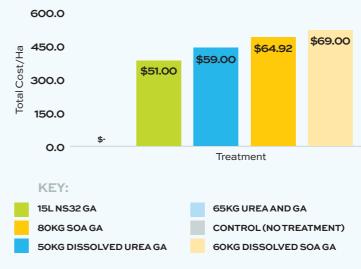
ASSESSMENTS The following assessments were undertaken:						
TREATMENTS	15L NS32 GA	80KG SOA GA	50KG DISSOLVED UREA GA	65KG UREA AND GA	CONTROL (No Treatment)	60KG DISSOLVED SOA GA
Total units of N	4.8	16.0	23.0	29.9		19.2
Reduction N compared to NS32		11.2	18.2	25.1		14.4
N reduction %		-70%	-79%	-84%		-75%
Application Kg/Ltr per Ha	15	80	50	65		60
Gib (grams) per Ha	9	9	9	9		9
Nitrogen & GA response Kg DM/Kg N	495	146	101	73		87
C0₂ eq/Kg	3.1	2.3	5.2	5.2		2.3
Total CO₂ eq/Kg per Ha	47.0	184.0	257.5	334.8		138.0
Total $\text{CO}_2\text{eq}/\text{Kg}$ per Ha compared to NS32		137.05	210.55	287.8		91.05
Total $CO_2$ eq/Kg per Ha reduction %		-74%	-82%	-86%		-66%
Total cost/Ha	\$51.00	\$64.92	\$59.00	\$74.00	\$ -	\$69.00
Total cost per Ha compared to NS32		\$13.92	\$8.00	\$23.00		\$18.00
Total cost per Ha compared to NS32%		27%	16%	45%		28%
Dry matter Kg/Ha grown at 22 days	2,378	2,343	2,329	2,179	1,822	1,675
Dry matter grown Kg/Ha compared to NS32		-35	-49	-199		-703
Dry matter grown Kg/Ha compared to NS32 $\%$		-2%	-2%	-8%		-30%
Cost per Kg of dry matter	\$0.021	\$0.028	\$0.025	\$0.034	\$ -	\$0.041

\* Pasture yield - harvests were taken on 22 DAA \*\* Feed analysis samples were taken on 22 DAA

#### TOTAL PASTURE GROWTH BY APPLICATION OVER 22D



#### TOTAL COST OF APPLICATION







#### NAME OF THE **RESEARCHERS:**

Pasture First Research for Blue Pacific Minerals

#### DATE OF SUBMISSION:

December 2023

### TRIAL OUTLINE:

Evaluation of the impact of Agrifert® NS32™ with Gibberellic Acid (GA) against traditional nitrogen sources with GA on pasture yield in cool climate conditions, focusing on nitrogen utilisation units.

This report contains the experimental methods used and presents the results obtained.

Trial site post harvest 22 DAA - 11 October 2023



for NS32, this was a reduction of between 66% and 86%

compared to other treatments. • Economics: Total cost of \$51/Ha





\$74.00

# CONCLUSION:

The study found that combining gibberellic acid with lower nitrogen levels, specifically using Agrifert<sup>®</sup> NS32<sup>™</sup> UAN fertiliser, achieved better results than higher nitrogen applications.

Agrifert<sup>®</sup> NS32<sup>™</sup> UAN, applied at 4.8Kg N per hectare, was as effective as alternatives using 23Kg of N for similar total DM growth. This resulted in a 79% reduction in nitrogen use. Furthermore, N response per Kg of DM was 495 Kg for NS32™ compared to the next best alternative of 101Kg which was 50Kg of Dissolved Urea and GA.

The combination of NS32<sup>™</sup> and GA not only meets forage efficiency and sustainability goals but also reduces costs by 16%, excluding application expenses, offering a viable, economical solution for farmers.

For the full Trial Report, please contact us.



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