

NZBioAmino™

Plant Nutrition

NITROGEN | AMINO ACIDS | BIOACTIVES

NZBioAmino™ 9% Organic Nitrogen delivers superior plant available nutrition. High concentration of Amino acids support both plant health and feeds soil biology with the addition of naturally occurring bio active compounds and trace elements derived from seaweed extracts. These have a critical role in promoting growth and helping the plant's stress response in extreme conditions to maximise crop health.



VEGETATIVE
GROWTH
STIMULATION



ORGANIC
NITROGEN



COMPLEX
AMINO ACIDS



ORGANIC
PRODUCT

Superior
yields,
naturally



Waikaitu

Plant Nutrition

NITROGEN | AMINO ACIDS | BIOACTIVES

High concentration of nitrogen and amino acids combined with the superior biostimulant properties of seaweed.

NZBioAmino™



Compendium	
Magnesium (%)	0.18
Phosphorus (%)	0.08
Organic matter	9%
Trace elements	100
Calcium (%)	0.02
Sulfur (%)	0.02
Sulfur (%)	0.02

*Natural variations in nutrient composition can occur

Applications: Foliar and Soil

General Application: 100L/ha - 40L/ha - 20L/ha during vegetative growth stage, with 2-4 week intervals.

Notes: Tank mix at 10°C water temperature for direct

toxicity product. Please handle through your local

Can be applied by hand or mixed with other suitable

herbicide applications.

Always apply to plants in growing conditions, maximum leaf moisture

include pre-planting to support fungicide or other control products and

Management Substrate or Soil. Do not use on plants with

such as Knapweed or Apple when used to prevent. *Obtain the

enhance the rate of these responses and increase the soil fertility.

Refer to our Technical Data Sheet for more specific requirements.

MAKING WELL, SUSTAINING LIFE. USE WITH RESPONSIBILITY AND CARE.

Conditions of Sale: As to control can be expected from the use of this

at the discretion of the user. The product is not an herbicide and

warranties expressed or implied, other than those specifically stated

included. The responsibility will be accepted by the grower for any

adverse consequences arising from the storage, handling, application or other

product.

Waikaitu Limited

PO Box 10000

1001 Agriway

Tauranga 3101

New Zealand

waikaitu.com

Not for human consumption

Keep out of reach of children



RECOVERY

Waikaitu



9% Organic Nitrogen

waikaitu.com

NZBioAmino™ combines the benefits of seaweed with a comprehensive range of amino acids – the building blocks for efficient protein synthesis, naturally providing 9% organic nitrogen.

NZBioAmino™ significantly increases mineralisation, availability and absorption of micro-nutrients leading to improved health, vitality and immunity of plants and soil biota. Amino acids form the foundation of plant cells. They improve the strength of cell walls and enzyme activity. Soil biology and plants use precious energy to synthesize necessary combinations of amino acids to form specific functional proteins. Having a ready supply of quality amino acids at key stages of growth helps support immune and defence mechanisms and enables plants to maintain the ability to recover and thrive. Directly applied to the soil, NZBioAmino™ supports and strengthens soil microbial communities, enabling better nutrient uptake as well as promoting extensive, healthy root systems. Foliar applications of NZBioAmino™ supports structural, metabolic, and mineral transport functions,

improving chlorophyll production leading to improved photosynthesis and increased energy for growth, fruit set, ripening, seed fill and protein production. At 9% organic nitrogen, NZBioAmino™ supplies nitrogen in a recognisable, high-quality form that plants can utilise immediately. Used in combination with high analysis N-fertilisers, NZBioAmino™ can significantly reduce nitrogen fertiliser use reducing costs while supporting soil functioning.

Key benefits

- High organic nitrogen content
- Source of crucial amino acids and trace elements
- Healthy plants and soils
- Reduced synthetic N inputs

Composition: (%*)

Nitrogen (N)	9
Phosphorous (P)	<0.003
Potassium (K)	0.016
Organic matter	50
Trace elements	mg/L
Calcium (Ca)	5500
Sodium (Na)	6000
Sulphur (S)	2800
Amino acids: Gly, Pro, Hyp, Glu, Ala, Arg, Asp, Ser, His, Lys, Leu, Val, Phe, Ile, Tyr.	

*Natural variations in nutrient composition can occur

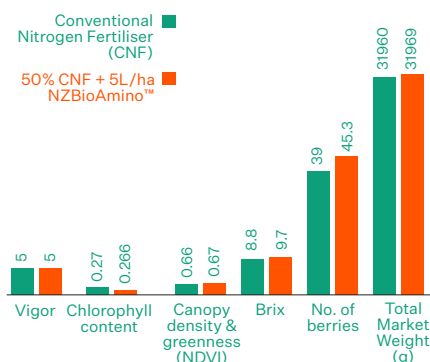
How to use:

Foliar/Soil	Dilution	Application
Agriculture	1:100	4–5L/ha, 2–3 times during vegetative growth stage with 3–4 intervals
Horticulture	1:100	4–5L/ha, 4-week intervals during vegetative growth stage

Trial Data:

Crop: Strawberry **Location:** Guadalupe **Analyst:** Pacific Ag Group
Replicates: 4 rows (10m each) **Application:** 50%reduction CNF + 6L/ha NZBioAmino™

	Conventional Nitrogen Fertiliser (CNF)	50% CNF + 5L/ha NZBioAmino™
Vigor (scale 0-10)	5	5
Chlorophyll content (0-1)	0.27	0.266
Canopy density & greenness (NDVI)	0.66	0.67
Berry sweetness (Brix)	8.8	9.7
No. of berries	39	45.3
Total Market Weight (g)	31960	31969



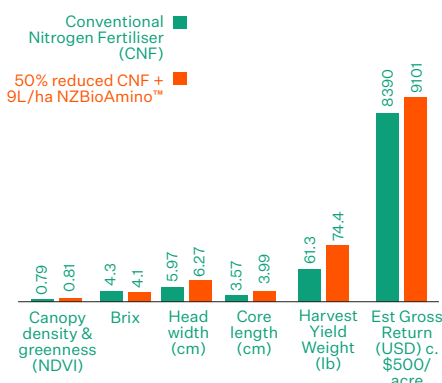
Note: Optimal spraying time is early morning or cloudy weather. Avoid spraying in windy, low humidity conditions or the heat of the day where chances of evaporation and burn are increased. Can be mixed with liquid synthetic nitrogen products

Mixing:

Suitable for all common sprayers and spray nozzles and is compatible with most standard crop protection treatments. Please see our mixing guide for further information.

Crop: Lettuce **Location:** California **Analyst:** Pacific Ag Group

	Conventional Nitrogen Fertiliser (CNF)	50% reduced CNF + 9L/ha NZBioAmino™
Canopy density & greenness (NDVI)	0.79	0.81
Berry sweetness (Brix)	4.3	4.1
Head width (cm)	5.97	6.27
Core length (cm)	3.57	3.99
Harvest Yield Weight (lb)	61.3	74.4
Est. Gross Return (USD)/acre	8390	9101



Remote sensing equipment used to measure canopy density and greenness showed plots treated with increasing rates of NZBioAmino™ resulted in significantly higher readings for chlorophyll content.

Statistically no differences in yields among the treatments for marketable lettuce was observed despite significant reduction in total nitrogen applied.

Brix was measured for soluble solid content in extracted leaf tissue, with no significant differences observed.

Increased returns (net benefit to grower of additional 500\$/acre) due to reduced waste and larger sized lettuces.