ALBATROSS HANDBOOK

NURTURE AND PROTECT THE NATURAL WAY



Growth & RUE



Stress protection



Efficient & effective

Sustainable & natural



Albatross

2021



www.interagro.co.uk



A new seaweed biostimulant to nurture and protect

Albatross is a highly concentrated cold pressed extract of the brown seaweed *Ascophyllum nodosum* that promotes healthier, higher yielding crops by increasing resource use efficiency and protection against stressful growing conditions. Free of synthetic chemicals and renewably sourced, Albatross provides a smarter and more sustainable way to optimise plant health and productivity.

At Interagro, we're not only known for our adjuvant expertise, we're also a leading supplier of premium quality, sustainable plant-based biostimulants to support efficient and profitable crop production in both conventional and organic growing systems.

At a time of increasing fertiliser costs, negative climate change and the call for more sustainable inputs that support regenerative farming practices, the beneficial effects of *Ascophyllum nodosum* offers growers an effective bio-based alternative to stimulate growth, improve water/nutrient use efficiency and build tolerance to stressful growing conditions without the reliance on synthetic inputs. Seaweed extracts are used widely as plant biostimulants to improve plant growth and fitness. With Albatross you can be confident in knowing that you are supplying the very best seaweed to your plants in a form that can be utilised best, for bigger and better results.



Highest quality seaweed available

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Benefits naturally derived

Albatross contains the freshest possible liquid extraction of *Ascophyllum nodosum* available. It is especially useful in regenerative and organic growing systems because it contains many natural components not found in synthetic fertilisers that have a regulatory and positive effect on plant growth:

- · Almost every micronutrient in a fully chelated (immediately available) form
- · NPK in low amounts but readily available for immediate uptake
- Phytohormones that stimulate growth and development and means plants don't need to waste energy making them
- Complex polysaccharides not found in land plants that signal plant defense
 mechanisms to ward off pathogens and protect from abiotic stress
- Bioactive molecules unique to brown algae that strengthen the plant defenses
 and immune response
- · Vitamins and enzymes that support plant growth and fitness
- Beneficial microorganisms that exude sticky substances which bind nutrients in the root zone





Guaranteed contents

Composition	%
Total Nitrogen (N)	0.8%
Total Phosphorous (P)	0.2%
Total Potassium (K)	1.8%
Fucoidans	0.5%
Laminarin	0.8%
Alginic Acid	1.6%
Mannitol	1.0%

Albatross ingredients and benefits to plants

Ingredients	Actives	Mode of action	
Macro and micronutrients	N, P, K, Mn, C, Ca, Zn	Supports growth and development of the plant	
Proteins	Amino acids and peptides	Stimulates growth and development of the plant	
	Fucoidans - unique to algae	Elicitor effect, inducing positive response to abiotic stress	
Polysaccharides (Storage carbohydrates)	Laminaran - unique to algae	Stimulates production of phytoalexins, helping defend against pests and diseases	
	Alginates - unique to brown algae	Promotes cell fluid balance and acts as elicitor, reducing salt and water stress. Also improves soil structure	
Betaines	Various - unique to brown algae	Protects cell walls from osmotic stress and inhibits chlorophyll degradation	
Mannitol	Sugar alcohol	Anti-oxidant to fight free radicals + osmo-protectant, reducing water stress on the plant	
Polyphenols	Plorotannins	Anti-oxidant to fight free radicals and strengthens cell walls from pathogen attack	
Phytohormones	Auxins, cytokinins, abscisic acids, gibberellins, ethylene	Promotes growth and development	



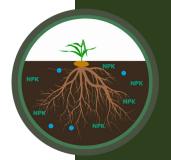
Albatross The root to higher yields, you'll sea!

Albatross combines the natural biostimulation and nutritional properties of the ocean with our sensitive harvesting and unique extraction techniques to provide your crops with the growth stimulation, nurture and stress protection needed for high yielding crops.

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 - Optimises plant growth and resource use efficiency
 - Protects against abiotic and biotic stress
- Sustainably and naturally derived
- Efficient and effective performance



For fitter, healthier plants the natural way



Optimises plant growth and resource use efficiency

Promotes rooting and nutrient chelation, increasing water and nutrient uptake

Albatross stimulates the rooting of plants, increasing access to water and nutrients from the soil. Growth promotion properties from naturally rich auxins and cytokinins help optimise plant establishment and development, whilst trace elements and macro/ micronutrients foster plant health from ground roots up. Nutrient availability and translocation are further enhanced by the natural chelating properties of Albatross, for immediate and effective adsorption into plants. Co-application with nutrient fertilisers bring additional resource use efficiency benefits for optimal plant growth and fitness.

Protects against abiotic and biotic stress

Stimulates the plant's natural defenses, building resilience to suboptimal growing conditions

Albatross contains natural anti-oxidants, enzymes, polysaccharides, and other bioactive molecules that stimulate the plants natural defenses against environmental stress and pest and pathogen attack. Regular applications of Albatross build resilience to abiotic and biotic stress that helps plants to withstand suboptimal growing conditions and ward off pest and disease invasion the natural way.

Sustainably and naturally derived

Sensitively harvested from the ocean, no artificial ingredients

Ascophyllum nodosum in Albatross is sensitively hand-harvested from the North Atlantic ocean, with every care taken to retain the seaweed base in-tact. This not only ensures future harvests, it also guarantees the protection and sustainability of this precious natural ecosystem for generations to come. With zero synthetic chemicals added, Albatross is a fully nature-based input for growers looking to a more sustainable way to support plant health.



Efficient and effective performance

Purest, freshest seaweed extract available, ensuring maximum uptake and application flexibility

Albatross contains the purest and freshest cold pressed *Ascophyllum nodosum* available. Produced within 12 hours of harvesting using a unique cold extraction process free from the use of heat and chemicals, Albatross retains all the bioactive molecules naturally present in seaweed, but with the exclusion of sodium chloride. This ensures maximum uptake and benefit to the plant, with optimal compatibility and miscibility for fast and effective performance.

...with Albatross



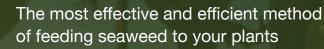
Sustainable, nature-based solution for growth stimulation, resource use efficiency and stress tolerance



Unique and innovative extraction process guarantees over 75% of raw *Ascophyllum nodosum* in its naturally derived form, in the finished product



Fast and effective adsorption that is 100% water soluble





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Approved for use in organic systems by Organic Farmers and Growers

Increases root mass by up to *55%



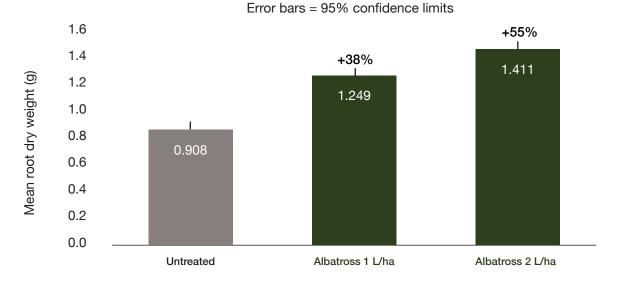
Increases shoot growth by up to *21%

* Source: Growth stimulation trials conducted on Winter Wheat at The University of Nottingham in 2019. 10 replicates, 95% confidence limits.

Performance in trials

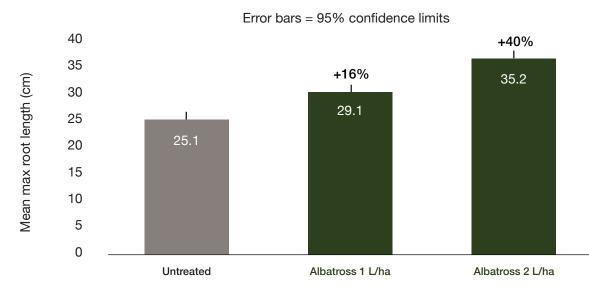
The rooting ability of crops has huge consequences on plant health. Plants with bigger root systems can not only extract more water and nutrients from the soil, they also have a greater ability to withstand suboptimal growing conditions, make better use of available resources, and achieve higher yields. Research at the University of Nottingham in the UK has shown that Albatross significantly increases root and shoot growth in Winter Wheat.

Albatross increased Wheat root growth significantly

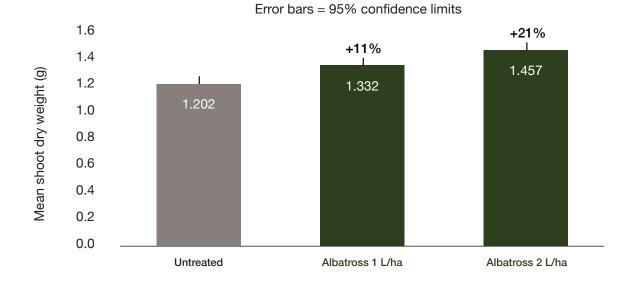


Effect of Albatross on early root growth in Winter Wheat

Significant increase in root length Effect of Albatross on early root growth in Winter Wheat



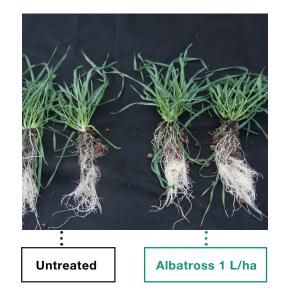
Significant increase in shoot growth



Effect of Albatross on early shoot growth in Winter Wheat

Key takeaways

- Albatross at 1 L/ha and 2 L/ha increased the root mass, root length and shoot growth significantly over untreated plants
- Increases were statistically significant at 95% confidence limits
- Improvements in plant health increased with dose and 2 L/ha Albatross increased root mass, root length and shoot growth significantly over Albatross at 1 L/ha



University of Nottingham 2021. Winter Wheat cv Siskin. Albatross applied at GS14, assessed 28 days after application. Temperature maintained between 15 and 20°C.

Key situations to use Albatross



Support crop establishment

Green up and maintain colour of grass and amenity areas

Enhance root growth and productivity



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Improve nutrient access, uptake and use efficiency by the plant

Optimise the uptake and efficiency of fertiliser when applied together

Increase resilience to environmental stresses such as drought, salinity, heat and frost

Improve drought patches

Provide a useful nutritional supplement in regenerative and organic systems

Enhance marketable yield and quality

Albatross product and application information

Classification	Seaweed biostimulant			
Composition	Cold pressed Ascophyllum nodosum			
Recommended use	All agricultural, horticultural crops, turf, grassland and amenity			
Rates of use	For Albatross application rates, please follow the specific guidance below. The L/ha rate refers to the dose at each application.			
Recommended use by crop	Сгор	Rate L/ha	Recommendations to support plant health	
	Cereals	1 - 2	Apply at the start of tillering, stem elongation and flag leaf emergence.	
	Oilseed Rape	1-2	Apply at 4-6 true leaves, stem extension and mid flowering.	
	Potatoes	1-2	Apply at stolon tip swelling, onset of tuber bulking and at full canopy.	
	Horticultural crops in general	1 - 2	Apply every 14 days from crop establishment. Target key stages of development or stress such as flowering, fruit set, tuber set.	
	Leafy vegetables	1-2	Apply 10 days after transplanting; before and after head set.	
	Orchards	1.5 - 2	Apply before each development stage. To enhance flowering and fruit set apply 21 and 7 days before flowering, and 4 and 14 days after petal fall.	
	Abiotic stress	1-2	For best results, apply 3-5 days before the onset of environmental stress	
	Turf and fairways	5 - 10	Apply every 3 months	
	Grassland and pasture	4 - 5	Apply in March and again in June or July	
	Greens and tees	10 - 20	Apply every 28 days	
Mixing	Shake the container well before use. Dilute the required quantity of Albatross in a minimum of 100 litres of water per hectare and apply as a foliar application to plants.			
Compatibility	Albatross is compatible with the most common plant protection products and fertiliser. However, before use, we recommend testing for compatibility to avoid any doubt.			
Pack size	10 litres			
Storage	Store in a cool, dry location away from direct sunlight. Keep cap closed when not in use.			

Get in touch

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Albatross is available to purchase online through Farm Marketplace and Farm Deals:

www.marketplace.farm www.farmdeals.ag