



PHYCOFIX FORTE

Liquid Kelp Biostimulant Concentrate
for Agricultural Crops

- Contains high levels of natural plant biostimulants
- Boosts plant establishment, growth and development
- Enhances natural stress resistance mechanisms
- Improves plant health, quality and yield

PHYCOFIX FORTE

KELP SOURCE - 80% Enzymatically Hydrolyzed
Ecklonia maxima 20% Enzymatically Hydrolyzed
Pelagic Fish Concentrate
(12% Protein Degree of Hydrolysis 50%)

These kelp forests are among the most beautiful and biologically productive habitats in the marine environment.

A dependence upon light for photosynthesis restricts the growth of kelp to clear shallow waters at depths of between 10 -15 meters.

Ecklonia maxima are adapted to growth in the intertidal zone and are constantly exposed to the rough oxygen rich waves of the Atlantic ocean.

White water kelp has one of the highest growth and regeneration rates in the plant kingdom.

The cell wall and cytoplasm of *Ecklonia maxima* are a rich source of alginates, auxins, cytokins, betaines, polyamines and other beneficial plant biostimulants

The reason why *Ecklonia maxima* is exclusively used in the production and formulation of Phycofix Forte is because of the numerous natural biostimulant compounds embedded in the alginates.

PHYCOFIX FORTE - The production process

Kelp fronds are harvested along the South African West Coast by divers at low tide off boats and processed the same day.

- The harvested kelp is washed to remove sand and foreign debris.
- This is followed by mechanical micronization.
- The micronized kelp is then enzymatically hydrolyzed with a series of proprietary enzymes at mild temperatures.
- No chemicals are added during the production process.
- The liquid phase is centrifuged to remove all remaining insoluble biomass.

BENEFITS - Enzymatic hydrolysis Process

- Enzymatic hydrolysis yields a soluble fraction of >6%. This is higher than other flowable commercial products.
- Soluble alginate has humectant properties and acts safer in spray applications especially during late applications on fruit crops.
- Enzymatic hydrolysis of the cell wall and cytoplasm enhances the release of biostimulants while preserving their biological activity.
- Other beneficial hydrolysates eg. amino and fatty acids are preserved.
- Valuable biomass is hydrolyzed and biostimulants retained.
- Powerful antioxidants with pronounced radical scavenging activity has been demonstrated.



PHYCOFIX FORTE

Application rates

FOLIAR APPLICATION:

CROP	RATE/HA	REMARKS
Berries Blue berries, Blackberries, Raspberries	1-5 Lt	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 300 Lt water/ha
Strawberries	1-2 Lt	Drench seedlings before transplanting (see drench application below). Apply 2 weeks after transplant. Repeat 14 days later, repeat 2 - 3 times. Apply in 200 Lt water/ha.
Bulb, Tuber and Root Crops: Onions, Garlic, Beetroot, Carrots	1-2 Lt/ha 1-2.5 Lt/ha	Drench seedlings before transplanting (see drench application below) Apply 2 weeks after transplant Repeat 14 days later, repeat 2 - 3 times Apply in 200 Lt water/ha
Potatoes, Sweet Potatoes	1-2 Lt 1-2 Lt 3-5 Lt 3-5 Lt	Start of emergence Apply 3 weeks after transplant Repeat 14 days after transplant Repeat 14 days later, repeat 2 - 3 times Apply in 200 Lt water
Cucurbits: Cucumber, Marrows, Melons, Pumpkins, Baby marrows	1-2 Lt/ha 1-2.5 Lt/ha	Drench seedlings before transplanting (see drench application below) Apply 2 weeks after transplant. Repeat 14 days, repeat 2 - 3 times Apply in 200 Lt water
Grain Crops: Maize, Sorghum, Barley, Oats, Wheat	1-3 Lt/ha 3-5 Lt/ha	Apply 2 - 3 weeks after emergence. Apply 14 days later. Apply in 200 Lt water/ha.
Grapes: Table Grapes and Wine Grapes	1-3 Lt/ha 3-5 Lt/ha 3-5 Lt/ha	Apply 2 - 5 cm shoot length. Apply 14 days later. Apply at pea berry size. Apply in 500 - 750 Lt water/ha
Leafy Vegetables: Lettuce, Spinach	1-2 Lt/ha 1-2.5 Lt/ha	Drench seedlings before transplanting (see drench application below). Apply 2 weeks after transplant. Repeat 14 days later, repeat 2 - 3 times. Apply in 200 Lt water/ha

Legumes: Dry Beans, Peas	1-3 Lt/ha 3-5 Lt/ha	Apply 2 - 3 weeks after emergence. Apply 14 days later. Apply in 200 Lt water/ha
Nut trees: Macadamia, Pecan, Wall Nuts	3-5 Lt/ha 3-5 Lt/ha	Apply at start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 200 Lt water/ha
Oil Seed Crops: Canola, Groundnuts, Soy beans, Sunflower	1-3 Lt/ha 3-5 Lt/ha	Apply 2 - 3 weeks after emergence. Apply 14 days later. Apply in 200 Lt water/ha
Ornamentals: Cut Flowers, Bulbs	1-3 Lt/ha	Drench seedlings before transplant (See drench application below) Apply 2 weeks after transplant. Repeat every 14 - 21 days. Apply in 200 - 500 Lt water/ha
Pineapples	1-3 Lt/ha 1-3 Lt/ha	Apply at the start of the growing season. Repeat application after 14 days. Apply in 1000 - 2000 Lt water/ha.
Pome Fruit: Apples, Pears, Quinces	3-5 Lt/ha 3-5 Lt/ha	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 1000 - 2000 Lt water/ha
Solanaceous Crops: Chilies, Paprika, Peppers, Tomatoes, Tobacco	1-2 Lt/ha 1-2.5 Lt/ha	Drench seedlings before transplanting (see drench application below) Apply 2 weeks after transplant. Repeat 14 days later, repeat 2 - 3 times. Apply in 200 Lt water
Stone Fruit: Apricots, Nectarines, Peaches, Plums	3-5 Lt/ha 3-5 Lt/ha	Apply at start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 1000 - 2000 Lt water/ha.
Sugarcane	3-5 Lt/ha 3-5 Lt/ha	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 300 Lt water/ha.
Subtropical Fruit: Avocados, Lichees, Mangoes, Citrus	3-5 Lt/ha 3-5 Lt/ha	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 1000 - 2000 Lt water/ha.
Guavas	3-5 Lt/ha 3-5 Lt/ha	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 300 - 500 Lt water/ha.
Other Crops	1-3 Lt/ha 1-3 Lt/ha	Apply at the start of the growing season. Repeat 2 - 3 times with 14 day intervals. Apply in 300 Lt water/ha.

SOIL APPLICATION:

All Crops	5-10 Lt/ha	Apply through irrigation water or apply directly to the soil with suitable applicator. Use sufficient water to wash into root zone. Use the lower dosage on younger plants and higher dosage for mature plants. Repeat application every 14 - 21 days as necessary.
------------------	------------	---

DRENCH APPLICATION:

Young Trees	2-4%	Ad 1 - 5 Lt solution drench or into the planting hole before planting.
Seedlings	2%	Drench seedlings or seedling trays for 5 - 10 minutes in solution before transplanting.

KEY BENEFITS OF USING **PHYCOFIX** FORTE

- Balanced ratio of natural plant growth stimulants
- Enhanced Root development
- Efficient nutrient and water utilization
- Optimized pollination, fruitset and development
- Heightened photosynthesis and improved plant health
- Superior resistance to abiotic stress
- Increased yields
- Compatible with the majority of agricultural sprays

PHYCOFIX FORTE

80% Enzymatically Hydrolyzed
Ecklonia maxima

20% Enzymatically Hydrolyzed
Pelagic Fish Concentrate
(12% Protein Degree of Hydrolysis 50%)

Sineria

Registered, Manufactured and Distributed by:

Sineria Holland BV Reg No.: 2005/039779/07

Randwycksingel 20-A015

Maastricht, 6229 EE, The Netherlands

Phone: +31(0)43 204 11 20

e-mail: info@sineria.com

www.sineria.com