

LEILI[®]

*The Power from Ocean
The Source of Health*



ONION, CABBAGE & CARROT

Leili Balanced Farming Solution



BEIJING LEILI MARINE BIOINDUSTRY INC.

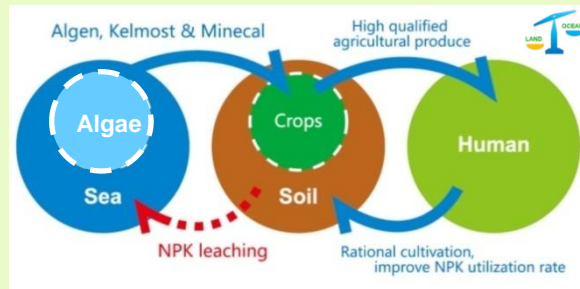
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www.leili.com

BLUE TECHNOLOGY SYSTEM OF BIO BALANCE

Leili Algal Balanced Farming(LABF) System is a ecological system based on biology and ecology. It takes sea water, algae, soil, crops and people as the study target, applies modern biology technology to improve the imbalance environment between ocean and land, solve the soil ecology imbalance problem, regulate plant physiological balance, enhance abiotic and biotic stress tolerance, correct the crop nutrient deficiency and induce crop resistance against diseases, in order to achieve crop balanced growth, secure the quality and nutrition of agricultural produce, promote human health, and establish a harmony biological cycle.

- Ecological balance of soil
- Physiological balance of crops
- Strong crops' own immune system



Raw material
(*Sargassum* sp.)

Enzyme screening

Bio-enzymolysis tech

Low temperature tech

Active small molecules

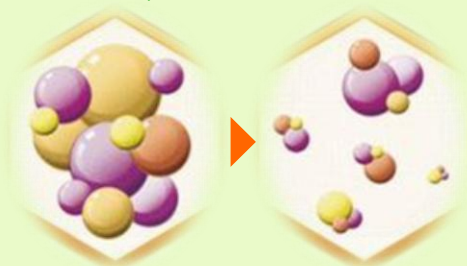


ENZYMOLYSIS OF WHOLE ALGAE

FEATURES of *Sargassum* sp.

- ◆ Strong vitality & reproducitivity (renewability)
- ◆ Abundant branches, spores & high cytokinin content
- ◆ Rich in algal active substances natural hormones
- ◆ Rich in rare minerals (alginic acid content, Iodine, high potassium content, rare mineral content)

Enzymolysis of whole algae is **WORLD'S LEADING technology!**



Under mild reaction conditions, Enzymolysis technology is more efficient than chemical and physical method without destroying the premise of nutrients and active substances. Enzymolysis technology can maximum retention algae active ingredients.

PATENT TECHNOLOGIES OF WHICH WE ARE MOST PROUD

Products can get **more and more fully active substance** through enzymolysis of whole algae technology.

- ✓ ALGENE—Algal endogenous hormone and secondary metabolite promote crops' physiological balance and stress tolerance.
- ✓ KELMOST--Algae polysaccharides form micelle structure, keep water and fertilizer holding, and promote micro-ecological balance in soil
- ✓ MINECAL--Sea minerals and trace elements are combined to be chelating materials which can be absorbed as organic molecules by crops.

ONION

Place: Japan (Nagasaki) and Ecuador

Variety: Spring onion

Time: Growth stage and transplanting date

Treatment:

Alga600--Foliar spray once, a month before harvest, diluted by 1; 1000 with 250 L water per 1000 m² about 2.5 kg/ha.

AlgaSoil--Top dressing 3 times, 870kg/ha NPK fertilizer + 261kg/ha Algasoil.

Control: Foliar spray other fertilizers

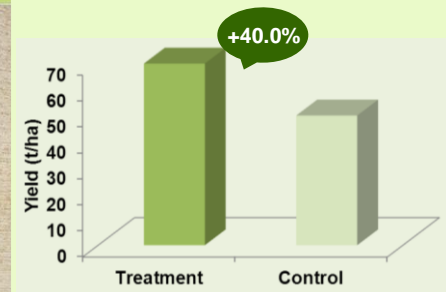
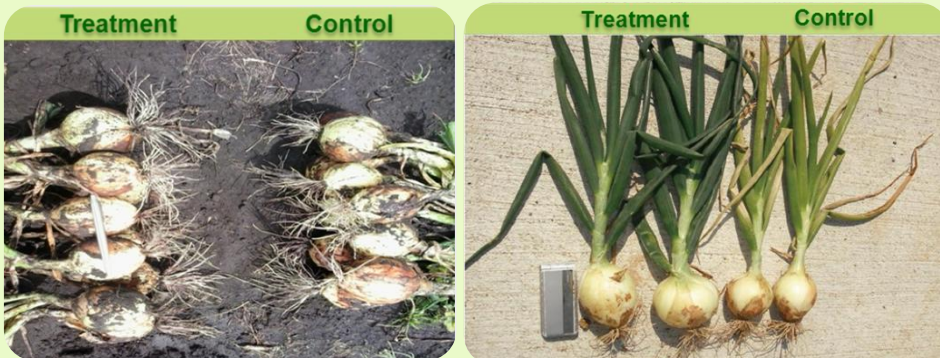
- ✓ *Improve the efficiency of nutrition uptake, control over growth*
- ✓ *Higher and wider stems with vigorous growth, induce the growth of new shoot*



- ✓ *Promote strong and new roots*
- ✓ *Reduce the symptoms of downy mildew (block leaf yellow)*
- ✓ *Less chemical fertilizers: replace 30% conventional NPK fertilizers*



- ✓ *Uniform, big and round bulbs*
- ✓ *Stronger anti-stress capacity*

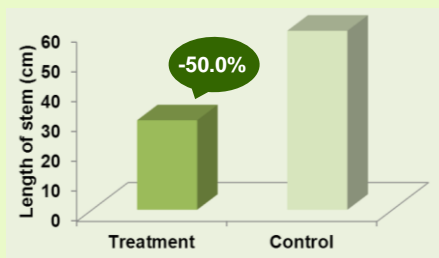


CARROT

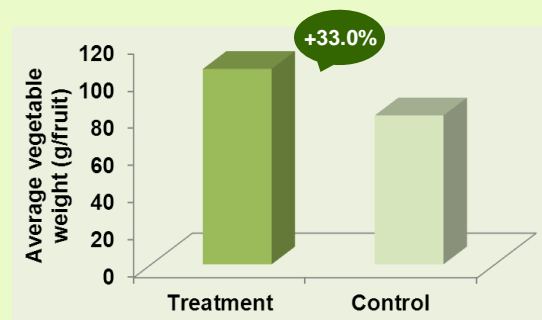
Growth Period: 120 days
 Place: Dominican Republic (Bona0) and Japan (User: Mr. Sayaka TsuchiYA in Chiba-ken)
 Control: Conventional chemical fertilizers
 Treatment: as follows

Main Product	Dosage		Timing
	Foliar spray	Drip irrigation	
Alga600	2.5 kg/ha	-	4-5 leaves stage; 30 days and 40 days after 1st application; 3 times starting from 2 weeks before harvest
SoftGuard	1.5 L/ha	-	4-5 leaf stage; 15 days after 1st application
AlgaSoil	-	130kg/ha	sowing stage; seedling stage

- ✓ **Balanced growth between leaves and tuber (treated leaves were 30cm shorter)**
- ✓ **Enhance anti-stress resistance, quickly recovery from severe frost and drought**
- ✓ **Less chemical fertilizers: replace 30% normal NPK fertilizers.**



- ✓ **Early harvest (20 days earlier)**
- ✓ **Uniform size, bright color and natural flavor of carrots**
- ✓ **The yield increased by more than 20%, the net profit increased by 50%**



CABBAGE

- ✓ *Uniform and healthy vegetables*
- ✓ *Big, thick and dark green leaves*
- ✓ *Enhance the resistance against diseases*



- ✓ *Accelerating plant wound healing*
- ✓ *Quickly recovery from natural disaster (especially the hail)*

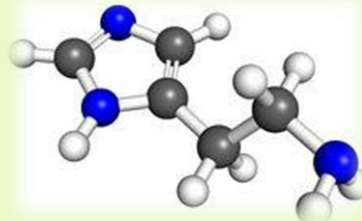


After hail damage



Four days later

Seamino—Concentrated seaweed extracts plus free amino acids



BENEFITS

- ✓ *Increase chlorophyll content*
- ✓ *Prevent nutrition from leaching thanks to the function of L-α free amino acids as strong chelating and complexing agents*
- ✓ *Improve roots absorption capacity*
- ✓ *Increase both abiotic and biotic resistance*
- ✓ *Enhance the hormones and proteins synthesis*

Alga600 (soluble ALGAL EXTRACT powder) and its function at eight key stages of plant growth

Which problems can be solved by Alga600?

- Unbalance of crop natural hormones, uneven plant vigor, few flowers and malformed fruits.
- Soil acidification and compaction, rot root, weak seedling, yellow leaf.
- Soil will be gradually infertile by applying chemical fertilizer, weak resistance.



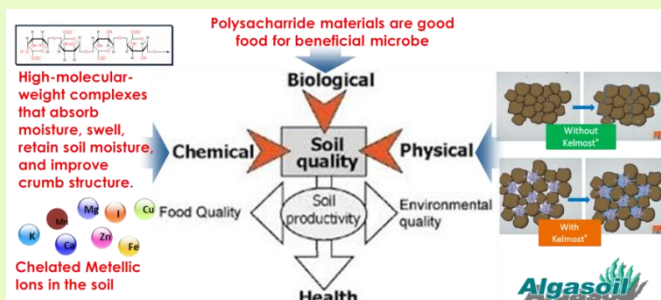
- Nursery period: avoid damping off and other disease in this period. Keep uniform strong seedlings without over-growth.
- After transplanting: recover fast, no dead seedlings, avoid soil-borne diseases.
- Vegetative period: short internode, thick strong stems, thick leaves, balanced vigor, disease resistance.
- Flowering period: early flowering, good bud differentiation, big and bright flowers, high flowering ratio, less falling flowers.
- Fruit setting period: high fruit setting rate, and prevent malformed fruit.
- Expanding period: fast expanding, uniform fruit size, high organics content, uniform maturity.
- Color transfer period: uniform and bright color, good taste, prevent sunburn and abnormal fruit.
- Harvest period: high yield and sugar content, big single size, late aging, stores well.

AlgaSoil (seaweed organic GRANULAR fertilizer)—Excellent soil conditioner



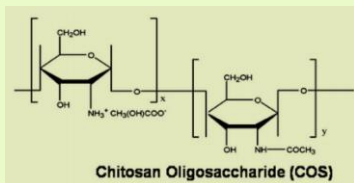
BENEFITS

- ✓ Stimulate tuber germination
- ✓ Promote strong roots
- ✓ Improve the rhizosphere environment
- ✓ Good soil quality (loosen and high content of organic matter)



SoftGuard improve plant IMMUNITY as an "armor"

Crop Immunity Enhancer (3000D)



BENEFITS

- ✓ Enhance disease tolerance to soil-borne diseases (potato late blight disease)
- ✓ Enhancing the ability of resistance nematode diseases (potato tuber nematode disease)
- ✓ Inhibit the systemic propagation of viruses and viroids throughout the plant
- ✓ Accelerating plant wound healing



Modes of action of COS

Chitosan Oligosaccharide (COS) has higher antimicrobial properties than chitosan and is presumed to act by disrupting permeabilizing the cell membranes of bacteria, yeast and fungi. COS is relatively non-toxic to mammals. Some of the pathways COS appears to affect include sensing, signalling, and the composition of the cell membrane.

Disclaimer: The above data and dosage is achieved in mentioned country or region. Local trials are still necessary before field application because of different circumstances. Leili cannot be held liable or responsible for a decision and/or action based on this recommendation.

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