



*The Power from Ocean
The Source of Health*



TOMATO

Leili Balanced Farming Solution



BEIJING LEILI MARINE BIOINDUSTRY INC.

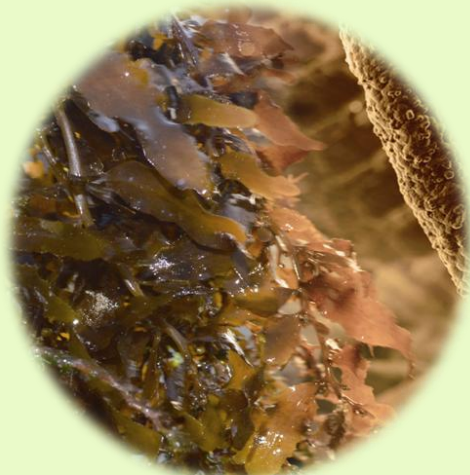
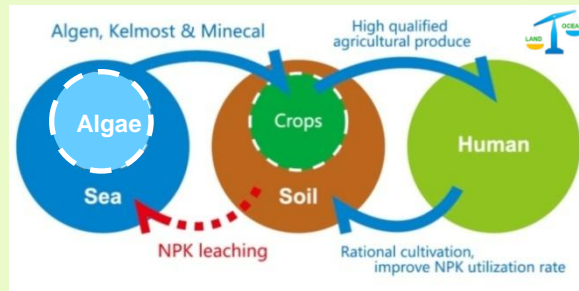
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BLUE TECHNOLOGY SYSTEM OF BIO BALANCE

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

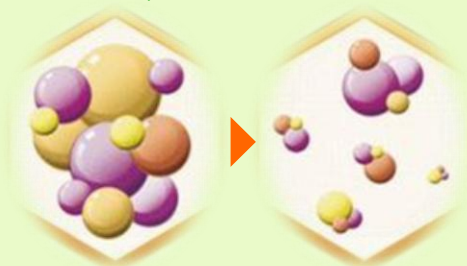


ENZYMOLYSIS OF WHOLE ALGAE

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.

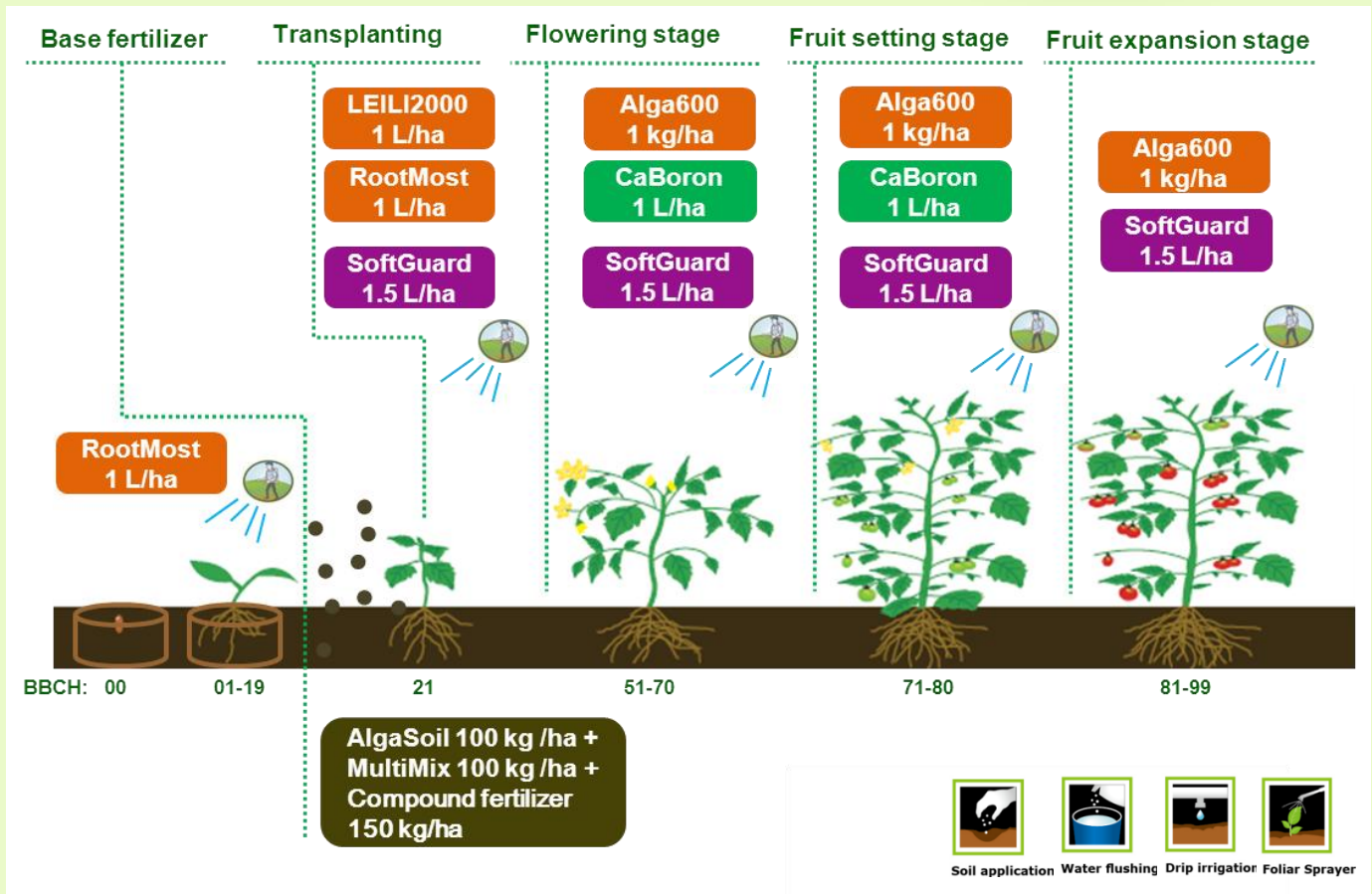
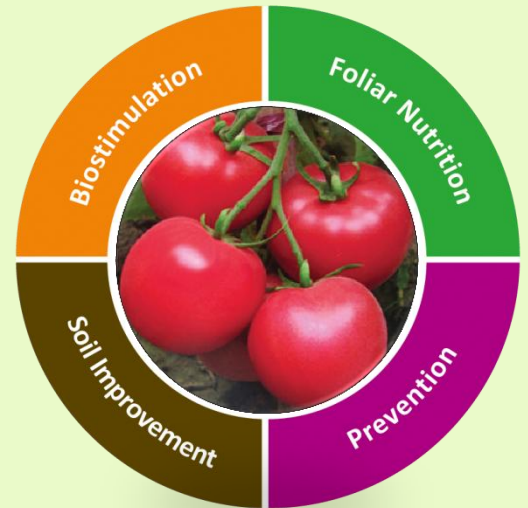
- ✓ ALGENE—Algal endogenous hormone and secondary metabolite promote crops' physiological balance and stress tolerance.
- ✓ KELMOST--Algae polysaccharides form micelle structure, keep water and fertilizer holding, and promote micro-ecological balance in soil
- ✓ MINECAL--Sea minerals and trace elements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

Precise Algal Biostimulant Solution

Basic Application on Tomato

BENEFITS

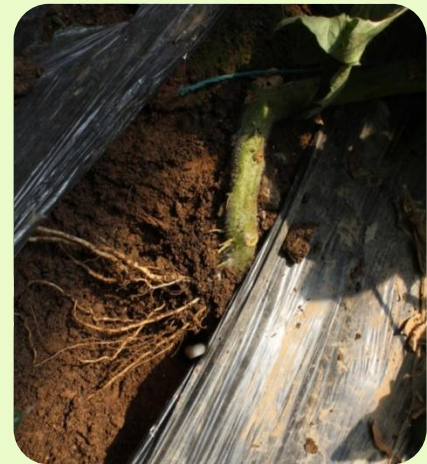
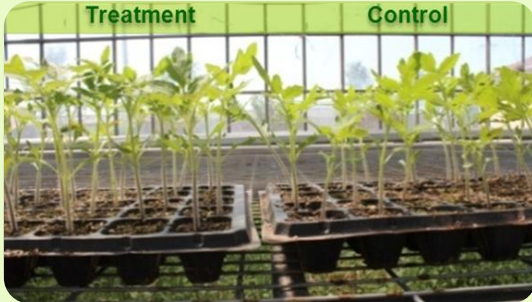
- ◆ Promote tomato vegetative growth
- ◆ Promote more flowers, early ripening and uniform fruit
- ◆ Delay senescence and improve yield
- ◆ Induce resistance to tomato root knot nematode and tomato yellow leaf curl virus (TYLCV)



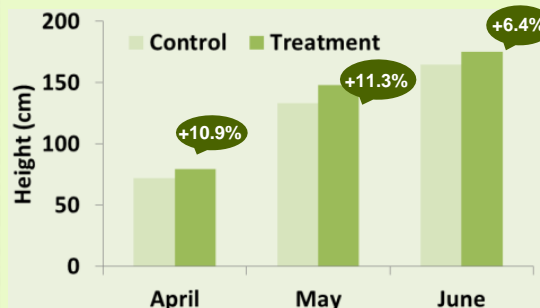
- Soil Improvement: AlgaSoil, MultiMix, ChitinSoil
- Foliar Nutrition: MicroRich, ProBoron, AminoTotal, ProZinc, CaBoron
- Biostimulation: Alga 600, Alga300(++), LEILI2000, Algreen, RootMost
- Prevention: SoftGuard(++), ProSilicon, AmiCa
- Seed Treatment: Alga600, Alga300, SoftGuard

HOW TO DEVELOP NATURAL & HEALTHY TOMATO? MANY FIELD TRIALS DEMONSTRATED THE EFFECT

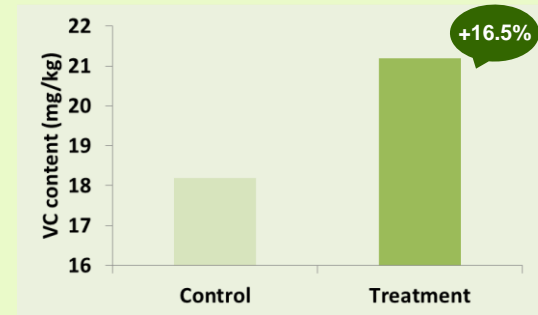
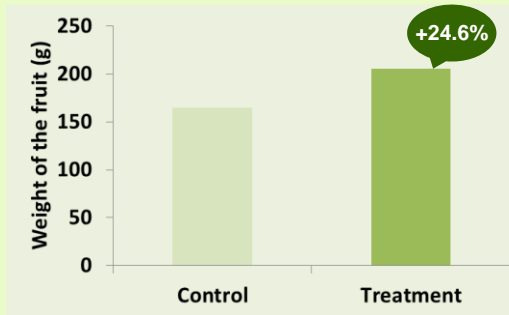
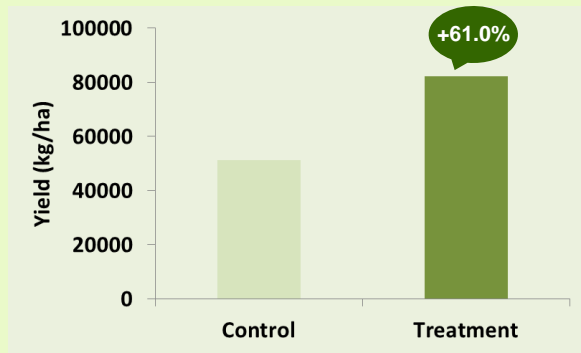
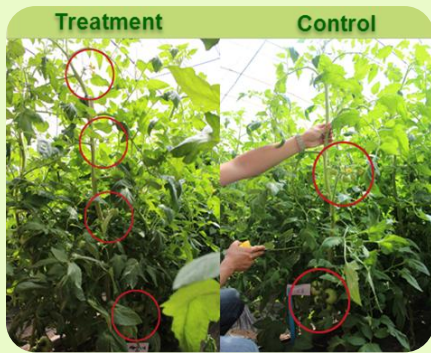
- ✓ *Increase effective roots by 50-100%*
- ✓ *Bigger crown and stronger root system*
- ✓ *Shorten the revival time after transplanting*



- ✓ *Foster vegetative growth (promote plant growth 10% and stem width 9%)*
- ✓ *Stimulate the growth of new leaves with thick and dark green color*
- ✓ *Improve the capability of anti-stress and decrease tomato diseases*



- ✓ **More fruit setting, early harvest (EIGHT days in advance)**
- ✓ **Uniform fruit with good color and big size**
- ✓ **High content of VC**



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.

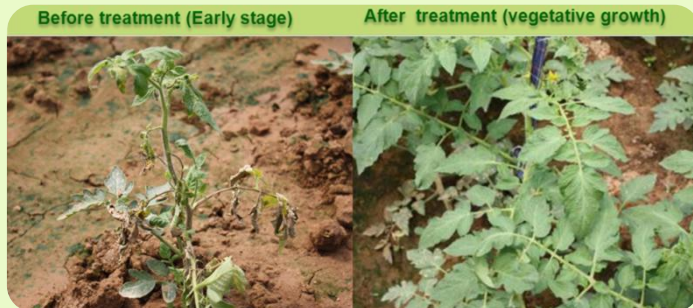


- **Nursery period:** avoid damping off and other disease in this period. Keep uniform strong seedlings without over-growth.
- **After transplanting:** recover fast, no dead seedlings, avoid soil-borne diseases.
- **Vegetative period:** short internode, thick strong stems, thick leaves, balanced vigor, 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.

SoftGuard improve plant IMMUNITY as an "armor"

✓ Prevent tomato from tomato yellow leaf curl virus (TYLCV)

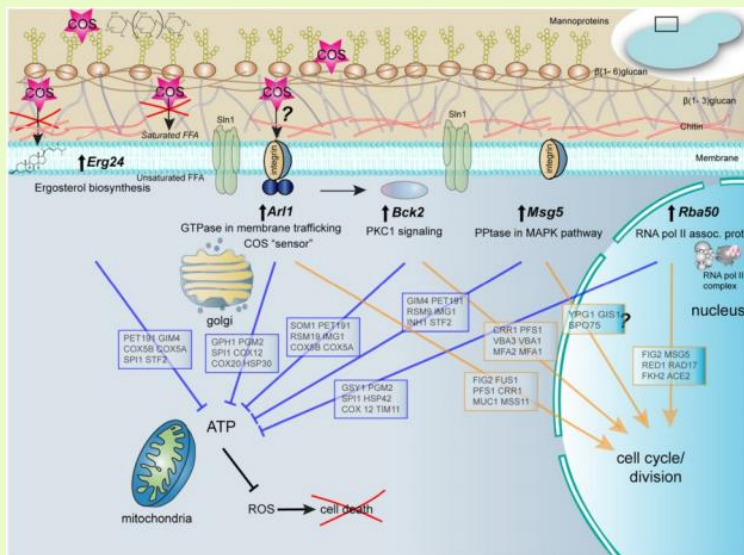
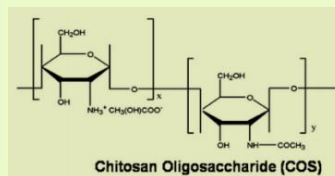
Place: Shandong, China
 Farm: Tomato in greenhouse
 Problem: at the early of growth, it occurred in TYLCV in large scale and result in low plant, curved leaves, became yellow in the edge of leaves, especially the new leaves at the top became yellow and shrink.
 Treatment: only apply Softguard 1:600-800, continuously apply 3-5times every 2-3days.
 Effects: 82.23%~79.13% of tomato was controlled.
 Recommendation: apply Softguard(1:400-600) + Virus cide (eg. Moroxydine hydrochloride)



Crop Immunity Enhancer (3000D)

BENEFITS

- ✓ Enhance crop immunity against fungal and bacterial infection
- ✓ Inhibit the systemic propagation of viruses and viroids throughout the plant
- ✓ Enhancing the ability of resistance nematode diseases
- ✓ Accelerating plant wound healing



The antifungal modes of action of COS

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.

COS can synergize with other antifungal agents such as Fluconazole suggesting that COS could be considered as alternative antifungal treatment to fungal pathogens that are resistant to other antifungal compounds or be used in combination with other antifungal agents to enhance their activity.

(Sohee Son et al. 2004, Macromolecular Research; Maria DLA Jaime et al. 2012, BMC Genomics)

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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