



*The Power from Ocean
The Source of Health*



POTATO

Leili Balanced Farming Solution



BEIJING LEILI MARINE BIOINDUSTRY INC.

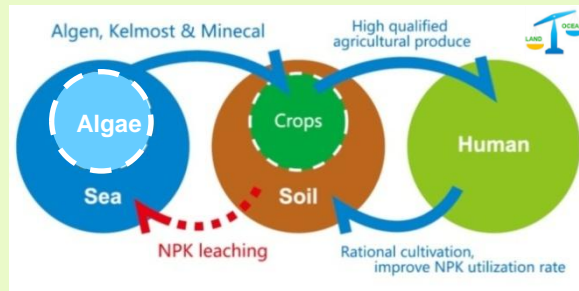
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BLUE TECHNOLOGY SYSTEM OF BIO BALANCE

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

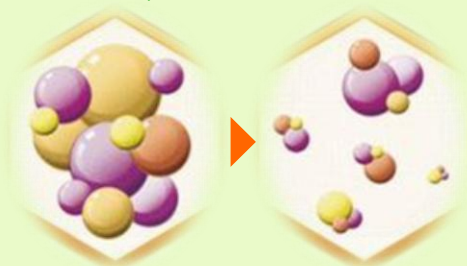


ENZYMOLYSIS OF WHOLE ALGAE

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.

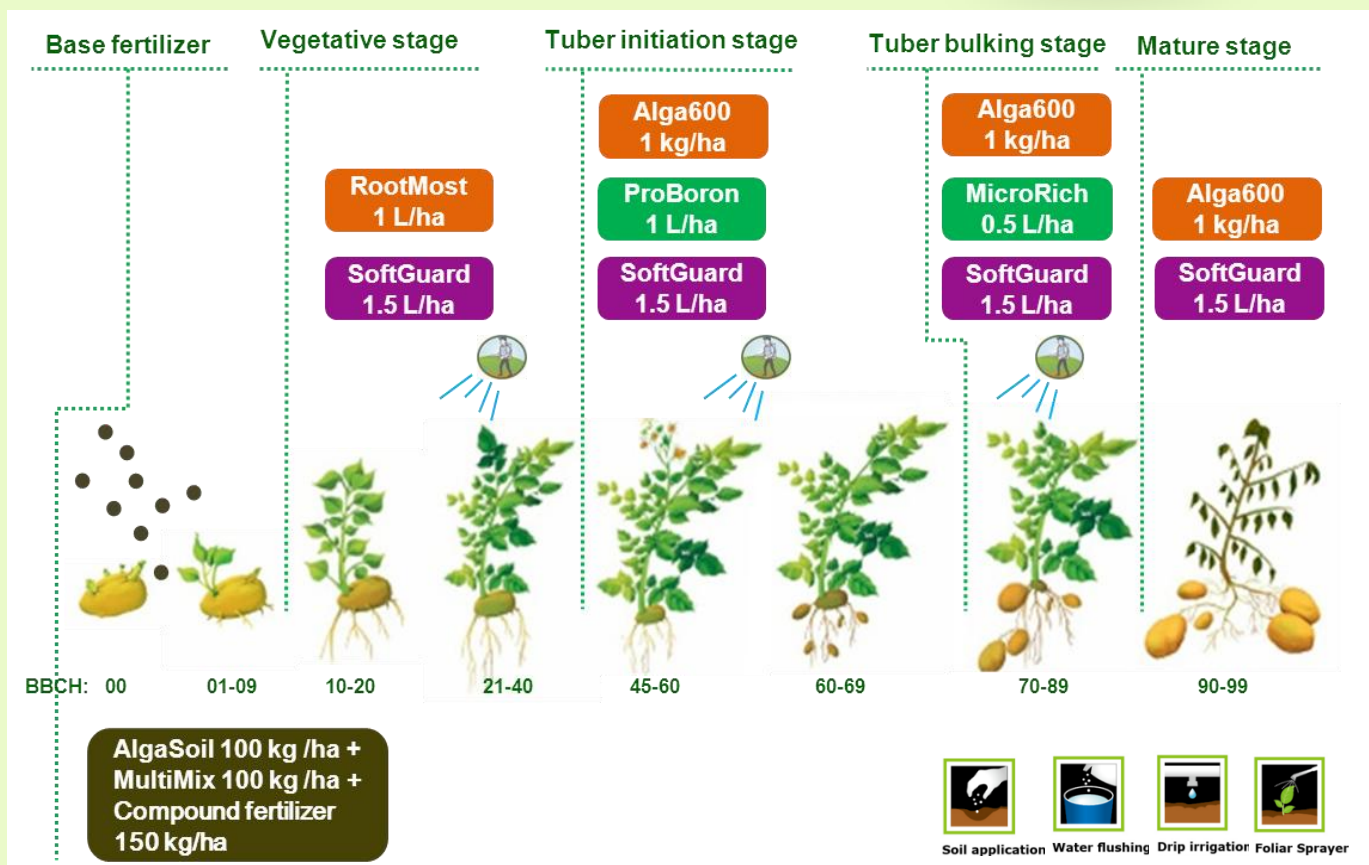
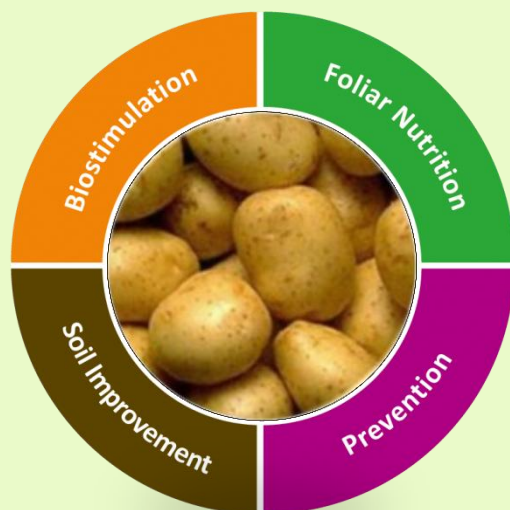
- ✓ ALGENE—Algal endogenous hormone and secondary metabolite promote crops' physiological balance and stress tolerance.
- ✓ KELMOST--Algae polysaccharides form micelle structure, keep water and fertilizer holding, and promote micro-ecological balance in soil
- ✓ MINECAL--Sea minerals and trace elements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

Precise Algal Biostimulant Solution

Basic Application on Potato

BENEFITS

- ▶ Stimulate tuber germination and root respiration
- ▶ Promote early ripening and uniform tuber
- ▶ Improve the uptake of nutrients
- ▶ Induce resistance to potato tuber nematode and late blight disease



- 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

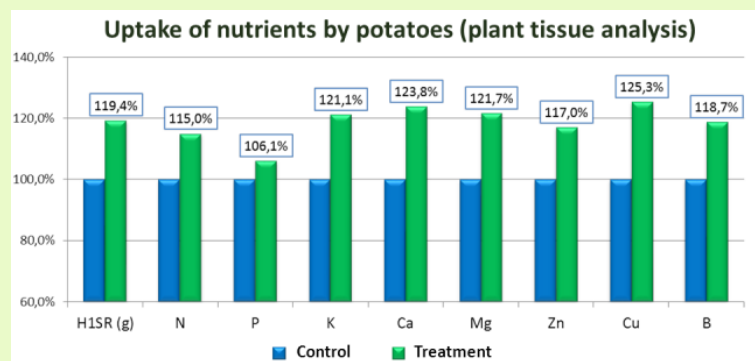
FIELD RESULTS

VIGOROUS GROWTH WITH STRONG ROOT SYSTEM

- ✓ Encourage earlier germination and root emergence, more vigorous roots
- ✓ Shorten revival time 3-7 days after transplanting, increase survival rate above 95%



- ✓ Promote strong plant with more leaves and uniform growth
- ✓ Increase the content of chlorophyll in leaves



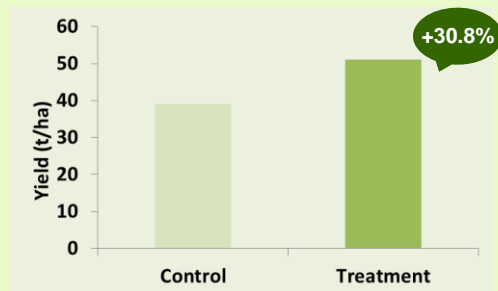
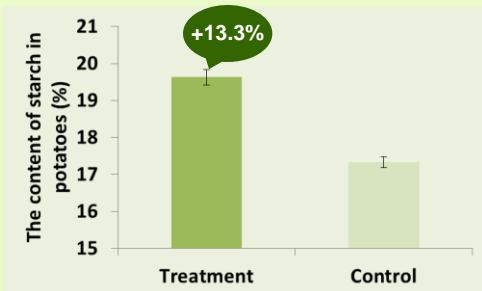
Agricultural University in Brno, Czech Republic

- ✓ Less chemicals: replacing conventional NPK by 20%, anticipating harvest by 2 weeks and cutting down agrochemicals by 3 times.

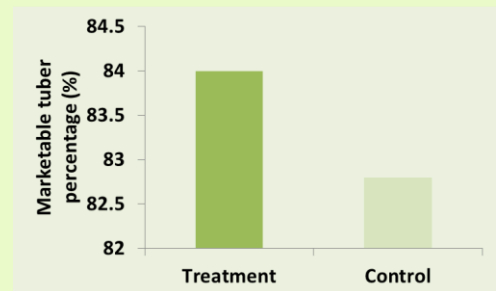
FIELD RESULTS

UNIFORM AND BIG POTATO TUBER WITH HIGH CONTENT OF STARCH

- ✓ *Potato tuber in bigger and uniform size, early harvest (TWO weeks advance)*
- ✓ *Increase the content of starch*



- ✓ *Better marketable yield and high marketing value*



Conclusion

- Balance the potato growth
- Produce green and thick leaves, thick stem and deep roots
- Potato tuber in bigger and uniform size, and total marketable yield
- Strengthen anti-stress and anti-disease capacity, help quick recovery after climate disaster
- Partly and safe alternative to chemicals

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.



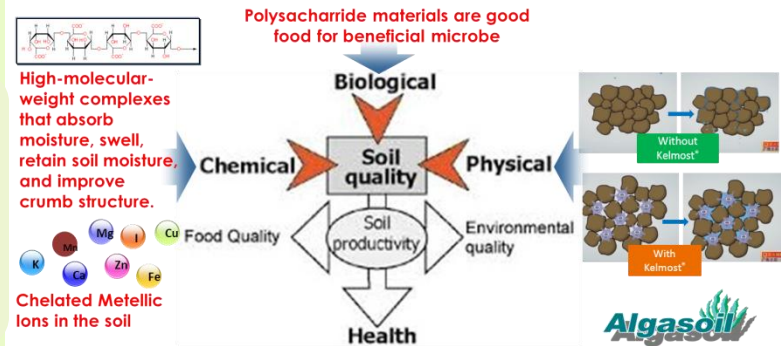
- Nursery period: avoid damping off and other disease in this period. Keep uniform strong seedlings without over-growth.
- After transplanting: recover fast, no dead seedlings, avoid soil-borne diseases.
- Vegetative period: short internode, thick strong stems, thick leaves, balanced vigor, disease resistance.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

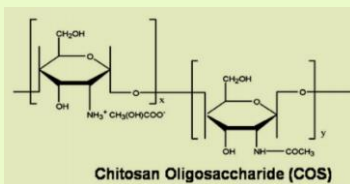
- ✓ Stimulate tuber germination
- ✓ Promote strong roots
- ✓ Improve the rhizosphere environment
- ✓ Good soil quality (loosen and high content of organic matter)



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

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.

