





EU | Hungary | ekshumin.hu

Socially Responsible, Sustainable and Organic Agriculture WORLDWIDE

# | WE TERRAFORM THE FUTURE |





source: Kimbal MUSK - Food is The New Internet

"Food is the New Internet, only bigger!"// Kimbal MUSK

## I. Organic innovation from the heart of Europe



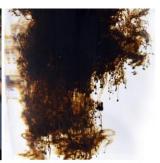
We are a Hungarian agricultural company committed to socially responsible, sustainable and organic agriculture WORLDWIDE!

## 2. The Product System

To affirm our commitment to remain a staunch supporter of human rights, we need to be aware of and utilize the latest agronomic practices designed to protect the environment, limit soil erosion, reduce the cost of production, and maximize the quality of foods. This is what BIOMIT® (a bio leaf fertilizer) and HUMIN Aqua HUMUSOL® (an organic soil conditioner with water soluble humic acid) system is 100% capable of!









1. BIOMIT organic leaf fertilizer

# **LEAFS**

- micronized dolomite
- herbal extracts and oils

2. HUMIN Aqua soil conditioner

# ROOTS

- water soluble
- native humic acid

# 3. A NEW form of agriculture with the BIOMIT® and HUMIN Aqua® system

What are the major differences?

BIOMIT® leaf fertilizer and HUMUSOL soil conditioner are 100% organic products



BIOMIT ® is a bio leaf nutrient, a suspension from fine dolomite powder and herbal extracts. We have developed a product that is unique in the world.

In addition to its high meso and micro nutrient content, it contains 70 kinds of plant extract as well. Its uniqueness can be seen from the fact that BIOMIT® is made after a proprietary formula. This recipe represents more than 15 years of work and is still under development through continuous research.

#### Advantages, specialities:

- 100% organic leaf nutrient, a suspension from fine dolomite powder and herbal extracts
- has an immediate effect
- recommended dose is 25 50 l/ha (depends on plant type)
- waiting period between application and harvest: 0 days
- enables the most efficient utilization of the genetic potential (productivity)

the given plant

- stimulates the defence mechanism of the plant, thereby improving disease resistance
- forms a thin, film-like layer on the leaves and shoots (protection, constant nutrient supply)
- this coating cannot be rinsed off by rain or irrigation water
- improvement of quality and storability
- supplementing the meso and micro nutrients required by the plant
- BIOMIT® and HUMIN Aqua® System, improving yields by 20-30% +
- preventing and eliminating nutrient deficiency symptoms

Nowadays, commercial production without plant protection is difficult to imagine, but the growing public concern towards healthier foods demands high quality agricultural products (low pesticide residue, free from heavy metals, etc.), so the products must meet these requirements, if the competitiveness of farming is to be maintained.

The use of environmental friendly products is more and more emphasized!

# HUMIN Aqua® soil conditioner, 100% organic products with water soluble humic acid









**HUMUSOL®** is a genuinely unique development in the agricultural sector. Humic acid is a treasure hidden within young coal, since we extract it from lignite via a gentle method (keeping the temperature under 60 °C, keeping the humic acid incredibly effective)

These acids are many thousands of years old. They play a key role in improving soil productivity and in helping plants grow. Without humic acid, even when the highest quality artificial fertilizer is applied to the soil, the plants still remain undernourished, as they are unable to utilize the nutrients without the presence of active soil bacteria and those nutrients simply get washed away with groundwater.

#### **DOUBLE EFFECT | Nutrition and soil cleaning:**

Humin molecules are kept together by weak chelated bonds, which break up easily and then act as donors (transforming nutrients, organic and artifical fertilizers into an absorbable form, while changing heavy metal ions into inactive molecules that cannot be bonded. Chelation is useful in applications such as providing nutritional supplements, and to remove toxic metals (Al, Pb,Hg, As etc.), and accumulated pesticides from the soil!

We employ special know-how to keep these heat sensitive acid molecules safe, resulting in a truly effective, never-before-seen product!

#### Advantages, specialities:

- 100% organic soil conditioner and yield enhancement, with humic acid
- makes the macro, micro, and mezo-elements useable
- supports the activity of soil bacteria
- plants gain developed root systems
- BIOMIT® and HUMIN Aqua® System, improving yields by 20-30% +
- more crops, earlier, healthier
- supports water management
- fertilize weaker/desert soils (documented trials on sand soils!)
- less rain/irrigation is sufficient
- recommended yearly dose is 25 50 l/ha (depends on soil quality)
- purifies soil by transforming heavy metal contaminants into a passive (effectively impossible to bind, inactive residue) form, thus it no longer affects living organisms. It continues to be present in the soil, it is not extracted, but it is "packaged." Consequently, areas contaminated by radioactivity and/or heavy metals can be utilized once again.
- allows the reuse of radiated/arid regions

The solution of effective and potent humic acids exhibit a peculiar behaviour after distillation, producing a solid residue. This residue is similar in appearance to a fibrous bundle. This way, humic acid can be effectively and quickly tested for potency and usefulness.

The dried forms generally dissolve in water.

## BIOMIT® and HUMINaqua®

leaf fertilizer and soil conditioner SYSTEM



immediate, quick effect improvement of quality better storability increasing the yield preharvest time: 0 days less irrigation is enough allow the reuse of arid region

humic acid

herbal extracts

protection

100 % organic

### Special need, special ingredients:













**CROP** 

**DESERT** 

**FLOWER** 

**GARDEN** 

**GOLF** 

## Sizes: 10 liter, 1,000 liter, full container







# 4. Advantages to Using the System



70 herbal ingredients

film layer

easy application



repellant

# **BIOMIT**

quick effect, instantaneously

root effect



water soluble



in desert, as well!

### less irrigation



# HUMIN aqua activates soil bacterias, mezo- and micro elements



## 5. What is the System?

## **Increases**:









- increasing yield 20 30+%
- top quality, earlier harvest
- higher saccharimeter, oil content
- drought- and frost tolerant plant
- better portability, storability
- preharvest day: 0 ! (bio organic)



# Significantly decreases:





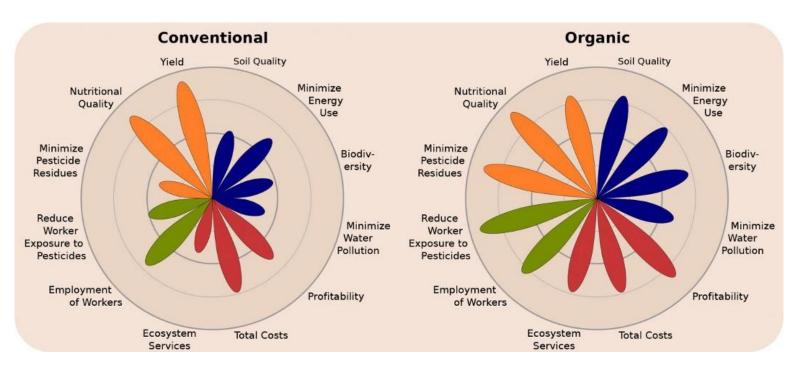






- fuel cost
- NPK, fungicid, pesticide use
- winter injury, drought impacts
- fungal, bacterial and viral diseases

# Why is organic agriculture so important in the future?



# 6. Soil cleaning effect of humic acid



SOIL CLEANING | industrial waste, chemical, nuclear and ecological disasters, over-fertilized plants

We offer a complete, quick and reliable solution in case of any disaster: ROYA fungus, cases of radiation/nuclear fallout, heavy metal pollution in rural areas in soil.

In case of emergency, humic acid is a rapid, effective and eco-friendly way to address national disasters in a cost effective manner.

Neutralizing effect of HUMIN Aqua fluid on heavy metal, industrial mud and radiated isotopes is proven by Bálint Analitika Kft, a NAT Certified Testing Laboratory. Hungary in 2016.

# 7. Our partners using the System now!



#### **Documented experiments:**

Hungary: melons, grapes (Tokaj, Villány), wheat, barley, sunflower, corn, potato, pepper, apple, strawberry

Our official experiments in China were started for multiple plant cultures based on the agreement we concluded with the State Research Institute in Beijing. We also concluded an agreement with the Research Centre of the number one state agricultural company in Harbin, Inner Mongolia—which is considered the centre of Chinese food production. Also along these lines, cooperation agreements have been concluded in Hailar, Hulunbuir prefecture, and Nanning in the Guangxi autonomous region.

China: corn, vegetables, grapes, cabbage, rapeseed, salad, tomato, pepper, potato, wheat, sugarcane, exotic fruits

Peru, Brazil: cocoa, coffee-tree, bananas, rice, pepper

Serbia: root vegetables, pepper, tomato, strawberry, peppers

Slovakia: rye, wheat, chilli/paprika, strawberry

Italy: tomato, rucola, salad, grapes, kiwi, olives/oleaceae

**Germany:** apple, wheat

**South-Korea:** vegetables, grass, fruits **Vietnam:** rice, vegetables, cereals

Would you like to see the numbers? Do not hesitate to contact us!

zsanett.nagy@eksgranit.hu

#### Official Strategic Partners:

UN (Egyesült Nemzetek Szervezete),

FAO (Egyesült Nemzetek Szervezetének Élelmezésügyi és Mezőgazdasági Szervezete),

WUSME (A Kis- és Középvállalatok Világszervezete)

**UNOPS (United Nations Office for Project Services)** 





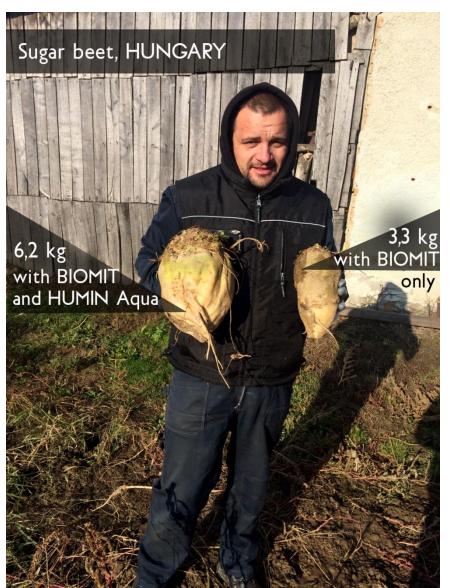
# 8. Pictures, results, without words:



BIO pepper ("paprika") hothouse plants with and without BIOMIT treatment only











BIO Pepper ("paprika"), chili from HUNGARY



## 8. SOCIAL ADVANTAGES

#### of using organic BIOMIT ® and HUMIN Aqua®system

#### The major problem is the pressure on the Government:

- to increase income from the food industry
- by producing premium quality and right quantity
- making a farmer's life attractive for young people, all over the country
- solve the problem of unemployment
- better education means increasing yield and better quality products for farmers
- build a pension solution model for small farmers
- we are opposed to child labour
- and support Fair Trade initiatives





## 9. ENVIRONMENTAL ADVANTAGES

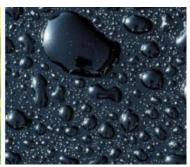
#### of using organic BIOMIT ® and HUMUSOL®

#### Benefits, short and long term:

- certified, tested, documented effects for more than 4 years (e.g. against ROYA fungi!)
- all product are 100% organic
- reduce the amount of chemicals used on the fields, perfect for exclusively bio/organic production!
- residents, working people and the environment in general becomes healthier
- BIOMIT® and HUMIN Aqua® present a multi-faceted, organic solution, consisting of: plant propagation, plant density, pest control, nutrition, shade, soil and water management, and waste management.







Please do not hesitate to contact us with any questions!

## Project and know-how owners:

József KOVÁCS

Managing Director

József SURÁNYI

Director of Strategy

EKS Humin Ltd | Hungary, PAKS, 38. Bercsényi utca

jozsef.kovacs@eksgranit.hu +36 (30) 846 72 77 jozsef.suranyi@eksgranit.hu +36 (70) 779 1034