



Biolife Plus Ltd

A Trade Inc Manufacturing and Developing Organic Products

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Biolife Plus Ltd.

Originally the company was established in 1994 under the name Biolife 2000 Ltd., (later modified to Biolife Plus Ltd.), with the aim of producing organic, environment-friendly products that make it possible to significantly reduce the use of chemicals in the cultivation of plants. The company was founded by private entities including those scientists who wanted to utilise the results of their ten-year long research in the products of the new company. In association with Hungary's leading researchers and research institutes, the founding scientists conducted laboratory, greenhouse and field experiments over a ten year period in which they examined produce cultivated solely from organic materials.

Based on the results of their experiments a new family of products was developed and marketed under the name of **HUNGAVIT** an organic plant-conditioner product line.

*If sprayed on the plant in proper dilution during the vegetation period, **HUNGAVIT** products increase the quality and quantity of yields, and also the plant's resistance to disease. Their application significantly reduces the amount of fertilisers and chemicals required, which not only makes production more economical and environment friendly, it also results in healthier products.*

The organic quality of the **HUNGAVIT** product line is ensured by the company's membership in the Organic Culture Association (a member of IFOAM, the International Federation for Organic Agricultural Movement), which classified the product range among products recommended in organic farming.

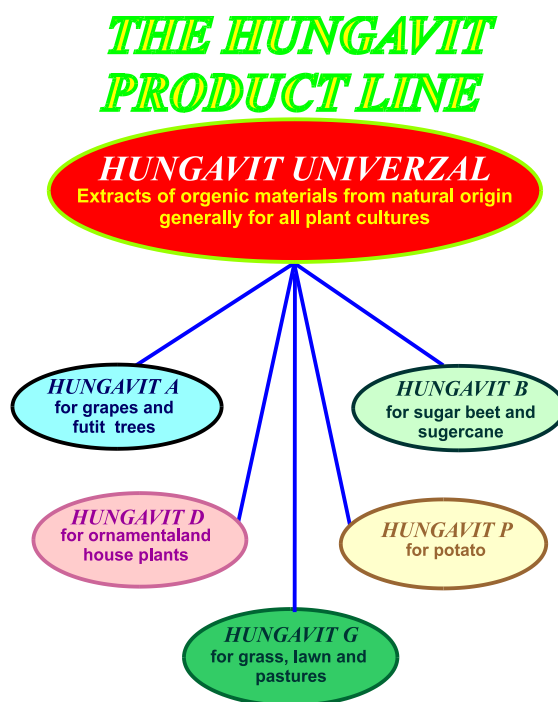
In 1996 BioLife received official authorisation to market the entire product line in Hungary. Since that time the number of users and the territories of application have significantly increased. The outstanding efficiency of the products has been proven by the experimental results as well as the increasing number of positive references from small and large-scale users.

The products have been successful in foreign countries as well, and are recognised and

acknowledged by an ever increasing number of producers in America, Europe and Asia.

BioLife company has continuously conducting intensive research into the production of newer and more effective formulae, which, besides helping the optimal nutrient utilisation of plants, also contribute to the realisation of effective environment-friendly plant protection. In this development program of the last few years, we developed new product line under the name of Mikrokondi organic foliar fertilizers and plant and soil conditioners.

In 2015 the company undergoes some share holder modifications and started additional developments of the new products under the name of Mikrokond organic foliar fertilizers product line



HUNGAVIT

Organic plant nutrients and foliar growth conditioners

At present, the product line consists of products. The efficiency of the **HUNGAVIT** organic plant conditioner is due to its biologically active components, which help plants optimally utilise available nutrients.

It is made exclusively from natural materials. It has been certified and recommended for use in organic cultivation by the Organic Culture Association - a member of IFOAM – and also by the Soil Association.

Fundamentally, the product is not a source of nutrients. The N, P, K and microelement concentrations are much lower than the values prescribed for natural and artificial fertilisers. These are insignificant from the point of view of its plant conditioning mechanism.

HUNGA VIT products are not regulators, since they do not influence specific vegetation processes.

HUNGA VIT contains organic compounds which plants derive from the soil through their roots – provided these are available in the soil – as well as compounds which the plants themselves produce to regulate their own development.

Its efficiency stems from the fact that it contains organic compounds in their natural proportions.

Basic ingredients: organic humus, composted plant particles, and minerals. The solution obtained from the extraction of these ingredients under natural conditions forms the base of **HUNGA VIT** itself.

Physical properties

It is transparent, light brown in colour, odourless and non-corrosive.

Chemical properties

HUNGA VIT contains plant nutrients and biologically active ingredients from natural origin, which favourably influence plant growth. These include enzymes, co-enzymes, organic and amino acids such as: ASP, THR, SER, GLU, PRO, LY, ALA, CYS, VAL, MET, ILE, LEU, TYR, PHE, HIS AGR etc. and inorganic salts.

Chemical composition of the products

nutrient s m/v%	HUNGA VIT						MIKROKONDI		
	U	A	B	D	G	P	S+Zn	M	G
pH	7,2	Developed to Mikro- kondi M	6,6	7,2	Developed to Mikro- kondi G	8,0	6,6	6.5	7.2
Dry matter	1,4		4,5	1,5		1,6	10,0	4.5	4.0
N	0,19		0,19	0,19		0,19	0,01	0.21	0,24
P ₂ O ₅	0,16		0,16	0,16		0,16	0,05	0.38	0.41
K ₂ O	0,08		0,015	0,08		0,15	0,08	0.11	0.13
Mg	-		0,20	0,05		-	-	0.11	0.06
S	-		-	-		-	1,6	0.45	0.45
B	-		0,40	-		-	-	0.07	0.04
Fe								0.20	0.05
Mn								0.03	0.16
Mo								0.002	0.004
Zn m/v %	-		-	-		-	0,08	0.02	0.10

Fire hazards: none

Application:

It can be used in all plant cultures provided it is appropriately diluted and sprayed on the plant at the correct phase of vegetation. In the case of certain plant cultures, especially natural cultivation technologies (house plants, ornamental plants, greenhouse plant cultivation), it can be added directly to the water used to water the plants.

Microbiological and toxicological properties

HUNGA VIT products are made from natural materials. They are non-toxic and present no danger to humans, animals or bees.

HUNGA VIT products cause no harm to the environment in any way.

Even over-application of the product will cause no harm. Even the undiluted solution concentrate cannot harm plants.

There is no waiting period with regards work or consumption safety.

THE UTILISATION OF **HUNGA VIT** PRODUCTS

The application technology of **HUNGA VIT** products was created as a result of many years of greenhouse and field experiments which proved that their application does not require any special agro-technical instructions. The dosage is very simple. As there is no danger of overdose, there's no point in applying too much, hence the prescribed concentrations are recommended purely for economic reasons. The best way to use it is in a suitable diluted form, as recommended

The recommended dose in most cases is 5 l/ha of **HUNGA VIT**. This should be diluted in 300-600 litres of water depending on the type of plants, the size of the foliage, and the applied spraying technology. In the case of aerial spraying from an aeroplane, it should only be diluted in 50-80 litres of water. In all cases, however, it is a basic requirement that the solution should be applied with the least possible losses, evenly distributed over the whole surface of the foliage. The minimum number of recommended applications is two to three – depending on the type of plant culture. The more often it is applied, the more effectively it increases the above mentioned favourable effects. The application manuals define the minimum number of applications that make the use of **HUNGA VIT** profitable.

However, with certain plant cultures a different dosage and frequency is recommended. These will be explained in the descriptions of the different products. The recommended time for spraying is early in the morning or late in the evening.

HUNGA VIT can be mixed with any type of plant protection chemical and foliar fertiliser. In order to avoid damaging its beneficial organic components, it is recommended that **HUNGA VIT** be the last component added to the spraying liquid.

The effects of **HUNGA VIT** have been tested for almost 15 years. The tests were carried out in the most significant research centres in Hungary: the Keszthely University of Agriculture, the Kecskemét Faculty of the Budapest University of Horticulture and Food Industry, the Gyöngyös College of the Gödöllő University of Agriculture, and the Kompolt Research Institute. The systematic scientific experiments are backed up by a vast

amount of experience from growers. Tests carried out in many other parts of the world including the USA, England, Canada, Austria and Vietnam show that **HUNGA VIT** can be used with excellent results in both organic and mass cultivation applications.

In the following, we will detail examples of why it is worthwhile using **HUNGA VIT** products for virtually any cultivation technology environment.

HUNGA VIT UNIVERSAL FOR ALL PLANT CULTURES

HUNGA VIT Universal is the basic product of the whole product line, and can be used effectively in all plant cultures. However, it is mainly used with vegetables, certain cereals, and is ideal in small household gardens. The recommended dose in arable applications is 5 l/ha in the right dilution during the proper phase of the vegetation period. The measure of dilution always depends on the applied spraying technology. There should always be at least 2 or 3 treatments depending on the plant culture. The *Directions for Use* enclosed with each product give advice about when the treatments should occur.

The number of applications should be increased in unfavourable weather conditions, with certain plant cultures, and with certain production objectives (seed production, high quality yields). In nurseries, greenhouses and vegetable fields the application of a 2-5% solution is recommended at least three times during the vegetation period. In plastic or glass greenhouses three to five applications are recommended.

EXPERIMENTAL RESULTS

1. Winter wheat

Tested plant: winter wheat

Variety: Early Kompolt

Treatments:

Control: untreated;

A: treated with foliar fertiliser, dose: 5 l/ha

B: one treatment with **HUNGA VIT U**,
dose: 5 l/ha

C: two treatments with **HUNGA VIT U**,
dose: 5 l/ha.

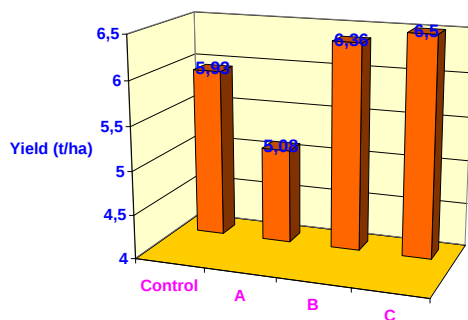
The tests were carried out on small and large sized plots.

The measurements were taken by the Faculty of Agriculture of Gödöllő University, Gyöngyös.

Results: see Figure 2

Figure 2

EFFECT OF HUNGAVIT ON THE AVERAGE YIELD OF AUTUMN BARLEY



Quality and plant hygiene observations:

	Control	Treated
Powder mildew infection (%)	3.5	2
1000 seed mass (g)	43.5	46.2
HL mass (kg)	50.3	53.2

Winter wheat: Stem stability significantly increased as the result of the treatment. As a consequence, while 70% of the untreated plot was lodged, on the plot treated with **HUNGAVIT U** only 15% of the wheat was beaten down.

Yields increased in both experiments by 15%. All other quality characteristics (1000 seed mass, HL mass, wet gluten content) increased significantly. At the same time the resistance to disease also improved.

2. Sunflower

Tested plant: sunflower

Variety: Blumix

Treatments:

Control: untreated

B: treated with **HUNGAVIT** (5 l/ha HU in 300 l of water) at the 4-6 leaf stage

C: see B + second treatment at blooming

D: see B + treatment with 5 l/ha mixed with foliar fertiliser

The measurements were taken by the Faculty of Agriculture of Gödöllő University, Gyöngyös.

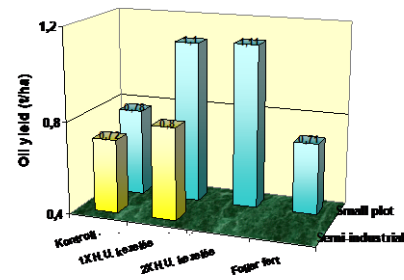
Results: see Figure 3

Oil yield increased by 20% as a result of the **HUNGAVIT** treatment. This was partly due to the increase in the seed mass, and partly to the increase in the oil content of the seeds.

In sunflower production, the **HUNGAVIT** treatments increased the yields and significantly improved all seed parameters.

Figure 3

THE EFFECT OF HUNGAVIT TREATMENTS ON THE YIELDS OF SUNFLOWER



3. Maize

3/a The tested plant: maize

Variety: MARA TC 297

Treatments:

A: untreated

B: 5 l/ha Forisol solution at the 4-6 leaf stage of the plants

C: 5 l/ha **HUNGAVIT U** at the 4-6 leaf stage of the plants

D: two treatments with **HUNGAVIT U**, each 5 l/ha, at the 4-6 leaf stage and at the commencement of blossoming

The measurements were taken by the Faculty of Agriculture of Gödöllő University, Gyöngyös.

Results:

Treatments	A	B	C	D
Yield t/ha	5.35	5.43	5.90	6.31

The yield of the plot treated twice with **HUNGAVIT U** exceeded that of the control plot by 18%. At the same time, the chemical foliar fertiliser brought an increase of only 1%.

3/b Tested plant: sweet corn

Variety: Dallas F₁

Treatments:

A: Control: untreated

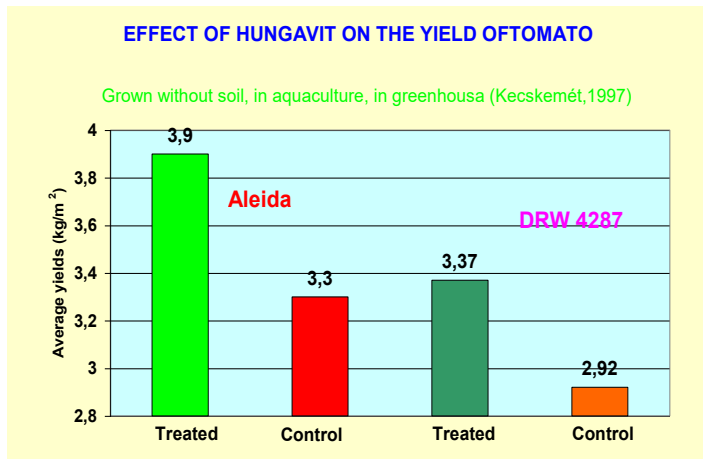
B: Treated with artificial fertiliser – 25 g/m² 34% ammonium nitrate before sowing; 10 g/m² 34% ammonium nitrate at blossoming

C: 1% HU treatment, treatment with 1% **HUNGAVIT U** solution at the beginning of teaselling and the beginning of seed development

D: 2% HU treatment, treatment with 2% **HUNGAVIT** solution at the beginning of teaselling and the beginning of seed development

Results: see Figure 4

Figure 4



The treatment with 2% **HUNGA VIT** solution resulted in a 64% yield increase compared to the control plot, and a 37% increase in comparison with the plot treated with artificial fertiliser. At the same time, the corn became more flavoursome because of its increased sugar content.

4. Capsicums (peppers) and tomatoes:

The **HUNGA VIT UNIVERSAL** treatment brought about outstanding results in vegetable gardening. Field and greenhouse experiments with different tomato varieties unambiguously proved that the **HUNGA VIT** treatments significantly increased the yields. At the same time the size of the fruit became larger, they became more flavoursome, and the plants became more resistant to disease. In the experiments with tomatoes, we tested a new variety of **HUNGA VIT**, labelled 'X', as yet unavailable on the market.

4/a Tested plant: greenhouse tomato (grown without soil, in hydro-culture)

Varieties: Aleida DRW 4387

Treatments:

A: untreated control

B: 1% **HUNGA VIT U** solution, (6 ml/m²) twice a week from the start of blossoming

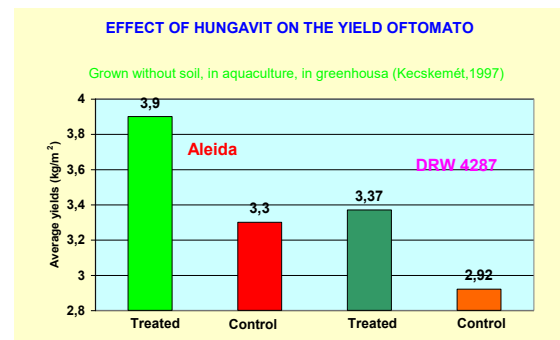
The experiments were carried out by the Kecskemét College of the University of Horticulture and Food Industry.

Results: see Figure 5

The results shown in Figure 5 clearly illustrate the effect of the **HUNGA VIT** plant conditioner. It provides plants grown in conditions without soil with an ideal nutrient supply. Significant results cannot be obtained in such conditions with the use of chemical fertilisers. The plant conditioner, however, enables the plants to better utilise the available nutrients, and also improves their resistance. Hence, even under these circumstances

it is capable of causing a 20% increase in yield, and a significant improvement in quality.

Figure 5



4/b Tested plant: tomato in flat open field experiment

Variety: Korall F1

Treatments:

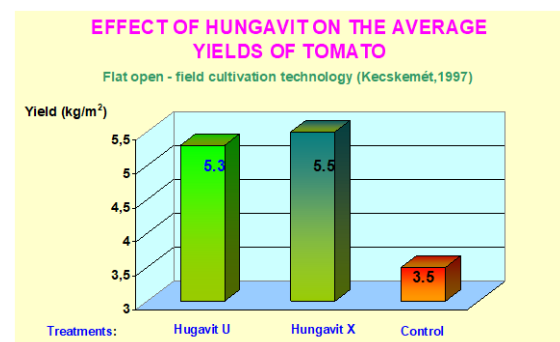
A: untreated control

B: treatment with 5% **HUNGA VIT U** solution three times after blooming.

The experiments were carried out by the Kecskemét College of the University of Horticulture and Food Industry.

Results: see Figures 6 and 7.

Figure 6



The 7% yield increase is partly due to the fact that, as a result of the **HUNGA VIT U** treatment, the resistance of the plants significantly increased, and thus plant protection became more effective. The yield growth can be mainly attributed to the increase in fruit size. (See Figure 7)

THE CHANGE OF THE AVERAGE MASS OF TOMATO FRUIT AS THE RESULT OF HUNGA VIT TREATMENT

Open field experiment (Kecskemét, 1997)

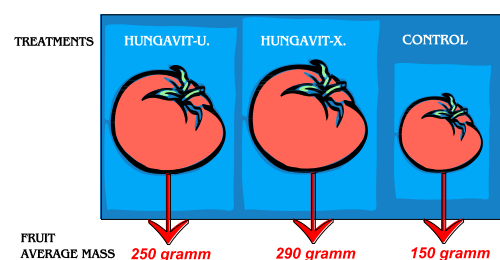


Figure 7

4/c Tested plant: capsicum (greenhouse)
Variety: Brill
Treatments:

A: untreated control

B: three treatments with 1% **HUNGA VIT** solution during the vegetation period.

The experiments were carried out by the Kecskemét College of the University of Horticulture and Food Industry. (Figure 8)

4/d Tested plant: capsicum (hothouse, open field experiment)

Variety: HRF

Treatments:

A: untreated control

B: three treatments with 1% **HUNGA VIT** solution during the vegetation period.

The experiments were carried out by the Kecskemét College of the University of Horticulture and Food Industry. (See Figures 8 and 9)

Figure 8

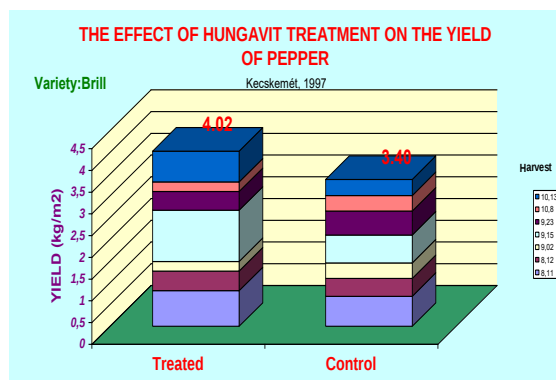
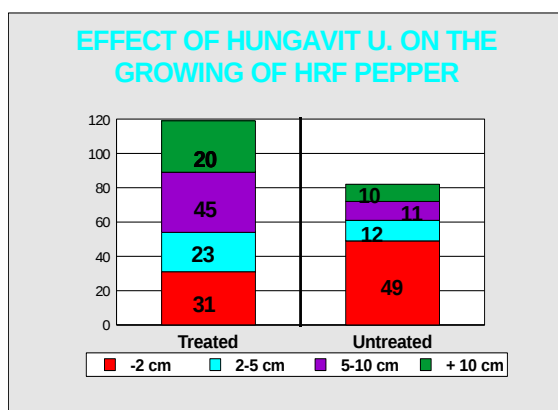


Figure 9



As the result of the **HUNGA VIT** treatment, both varieties of peppers showed significant growth in yield with both technologies. In open field experiments, this growth exceeded 40%. A very

important effect of the treatment is that the harmful inorganic N concentration of the treated peppers is reduced to 67% of the untreated variety.

Thus, the use of the **HUNGA VIT** plant conditioner makes it possible to produce healthier vegetables. This is supported experiments on other vegetables such as tomatoes, radishes, and lettuce etc.

5. Green beans

Tested plant: green beans

Variety: Cherokee

Treatments:

A: untreated control (the nutrient level of the soil was set for each treatment)

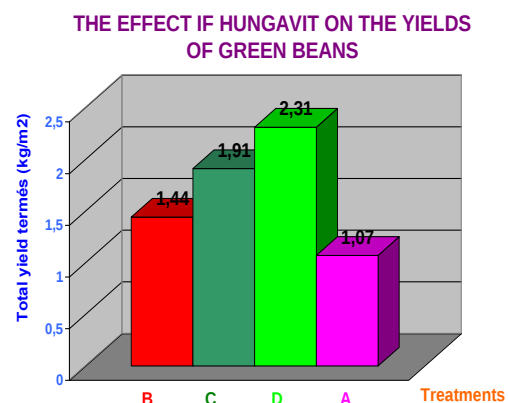
B: twice treated with artificial fertilisers (45 g/m² P before sowing, 40 g/m² K, 5 g/m² N and 10 g/m² N after full blossom)

C: B + three treatments with 1% **HUNGA VIT U** solution.

D: B + three treatments with 2% **HUNGA VIT U** solution.

The experiments were carried out by the Kecskemét College of the University of Horticulture and Food Industry. (See Figure 10)

Figure 10



In addition to the artificial fertilisers applied in large scale production, the **HUNGA VIT** treatment resulted in a remarkable 0.87 kg/m² or 60% yield growth. At the same time, the first green beans were picked 3-5 days earlier in the treated plots, which could result in a significant growth of returns in the case of early-marketed spring vegetables.

The application of **HUNGA VIT** resulted in similarly outstanding quality improvement and quantity increases with other vegetables as well. i.e. green peas, cucumbers, lettuce, radishes etc.

In some cases (cucumbers and lettuce) the growth of yields exceeded 60%, which added to the improvement of the plants' resistance and the quality of the yield.

6. Rice

HUNGA VIT is capable of producing good results under non-moderate climatic and soil conditions. It proved its outstanding efficiency compared with foliar fertilisers even in tropical territories.

Tested plant: rice

Variety: OMI 1490

Treatments:

A: three treatments with 7.5 l/ha

HUNGA VIT

B: Komix foliar fertiliser *

C: Bayfolan foliar fertiliser *

D: Bimix bifolan

E: Bited foliar fertiliser *

F: Untreated control

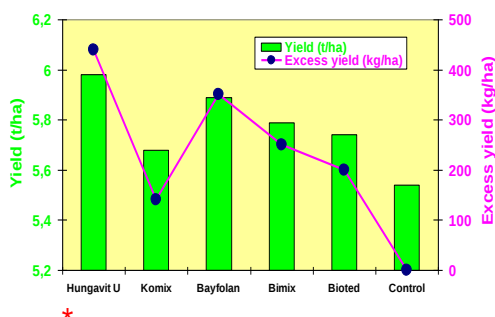
*Foliar fertiliser application in the prescribed doses.

The experiments were carried out by the National Rice Research Institute, Vietnam, 1998.

Results: see Figure 11

Figure 11

The effect of HUNGA VIT on the yield of rice compared with the effect of foliage fertilisers



The **HUNGA VIT** treatment was more effective than any of the foliar fertiliser treatments

7. Tea

Tested plant: tea

Variety: TB14

Treatments:

A: three 5 l/ha **HUNGA VIT** treatments *

B: HPV 301.N foliar fertiliser*

C: Komix BFC 201*

D: Bimix top 94.6 *

E: Untreated control

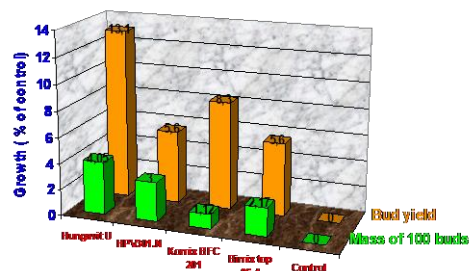
*The foliar fertiliser treatments were applied in the doses prescribed by the manufacturers.

The experiments were carried out by the Bao Loc Tea Cultivation Centre, Vietnam.

Results: see Figure 12.

Figure 12

The comparative analyses of HUNGA VIT and other foliar fertilisers of tea



As a result of the **HUNGA VIT** treatments, the yield of tea increased by 13%. Almost half of this increase was due to the increase in the size of the average bud. With the application of foliar fertiliser it was not possible to even get close to these results.

HUNGA VIT A grapes and fruits

The boron and magnesium fortified **HUNGA VIT A** product line was applied in doses of 5 l/ha (usually diluted in 500 litres of water) three times during the vegetation period. The first treatment was carried out at the beginning of blooming, the second at the end of setting, and the third just before harvesting. On smaller plots, 0.5 l **HUNGA VIT** was diluted in 20 litres of water and applied with manual sprayers. The number of and the time the treatments were applied was identical. **HUNGA VIT** can be mixed with all plant protection chemicals, hence treatments can be carried out together with other routine sprayings. The instructions contain guidelines for mixing.

For fruit trees, two treatments are recommended with 7-10 l/ha doses at the beginning of blossoming and ripening. An increase in the number of treatments results in an improvement in the effect of the solution.

In the case of melons, strawberries and currants, at least three treatments are recommended in doses of 5 l/ha.

HUNGA VIT A can be effectively applied in tobacco growing, especially for the quality improvement of Virginia varieties.

8. Grapes

8/a: Tested plants: grapevine

Varieties: Zenit, Pinot Noir, Traminer

Treatments:

A: untreated

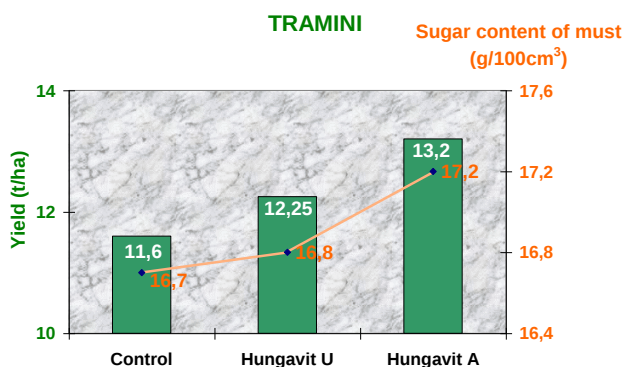
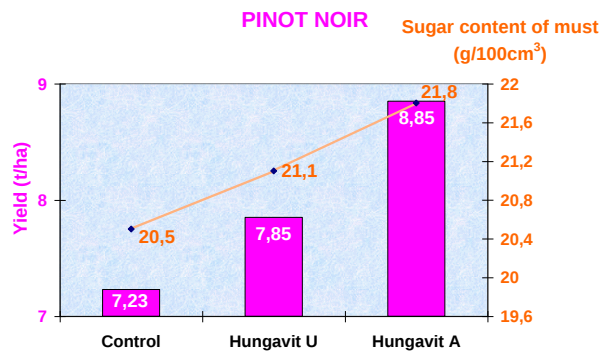
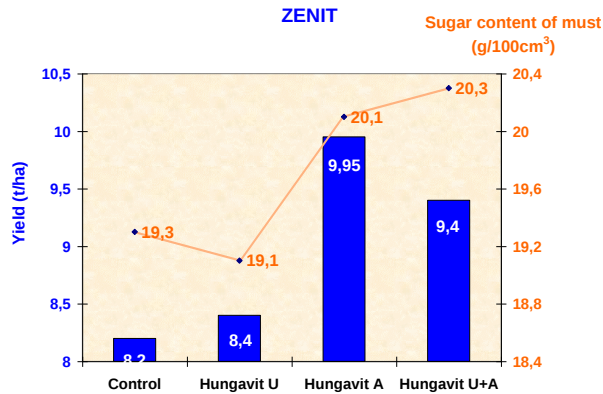
B: three treatments with 5 l/ha of

HUNGA VIT U diluted in 600 l of water

C: the same as **B** but with **HUNGA VIT A**
 The experiments were carried out by the Gyöngyös Faculty of the Gödöllő University of Agriculture.
 Results: See Figure 13

Figure 13

THE EFFECT OF **HUNGA VIT A** TREATMENT ON THE YIELD AND QUALITY OF VARIOUS GRAPE VARIETIES



In all cases the **HUNGA VIT A** treatments resulted in a 10% increase in yields and 1% increase in sugar content.

The **HUNGA VIT U** treatments also increased both the quality and the quantity of the yield, which proves that it can be effectively used in all types of plant cultures.

However, the **HUNGA VIT U** treatments proved more effective in the case of all grape varieties examined.

It can be observed that the efficiency of plant protection in the treated plant population was much better, which is undoubtedly the result of **HUNGA VIT** plant-conditioning effect, because the better the condition of the plants, the better their resistance to diseases is.

8/b. Tested plant: grapevine

Varieties: Leányka, Olasz (Italian) Riesling

Treatments:

A: contact chemicals protection

B: contact chemical protection + **HUNGA VIT A**

The experiments were carried out by Dr. Ing. Gaspar Vanek , Bratislava.

Results: see Figure 14 and 15

Figure 14

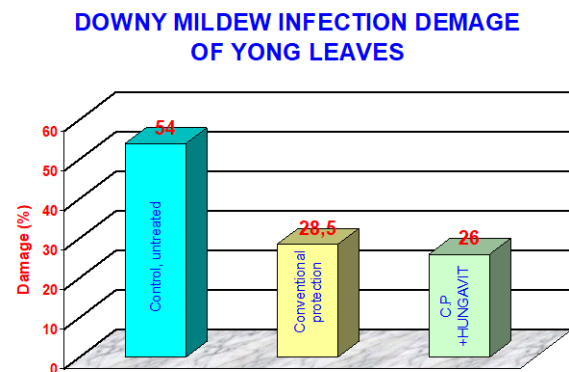
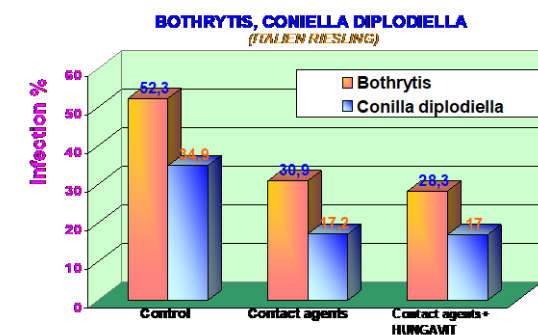


Figure 15



The significant increase in the efficiency of plant resilience can be clearly seen in the bunches and leaves of the grapevines. This experiment proves that it is possible to provide effective plant protection in both organic and sustainable grape cultivation processes with the application of environmentally friendly plant protection agents.

9. Tobacco

Two treatments are recommended on tobacco plantations during the vegetation period with a 5% water solution of **HUNGA VIT A**. The tests were carried out with the most common Virginia varieties.

As the result of the **HUNGA VIT** treatment, the quality of the Virginia varieties significantly improved. The sugar content of the treated plants increased by 19.6%, the protein N concentration decreased by 10.06%, and the alkaloid (nicotine) content also showed a decreasing tendency.

HUNGA VIT B for sugar-beet and other root crops

HUNGA VIT B is sprayed on the beetroot plants in doses of 5 l/ha diluted in 400-600 litres of water, in two treatments during the vegetation period. The first treatment should be given during full vegetation, the second 3-4 weeks before harvest.

HUNGA VIT B can be used with excellent results on all root crops such as carrots, parsnips, ginseng etc. In these cases 2-3 treatments are recommended with 1% solution doses of **HUNGA VIT** sprayed directly on the plants.

10. Sugar beet

The effectiveness of **HUNGA VIT B** on sugar-beet production was proven by tests conducted by sugar factories with their own grower/suppliers. The quality tests on sugar beet were also carried out in the laboratories of the sugar factories.

Tested plant: sugar beet.

“A” location

Treatments:

- A/1 artificial fertiliser with 80 kg of N agent
- A/2 artificial fertiliser with 40 kg of N agent
- A/3 untreated control
- A/4 with two treatments of 5 l/ha solution of **HUNGA VIT B** diluted in 500 l of water

The test was carried out by AGROBÁZIS RT. Kaba.

“B” location

Treatments:

- B/1 100 kg N/ha artificial fertiliser
- B/2 100 kg N/ha artificial fertiliser + two treatments of 5 l/ha **HUNGA VIT B** diluted in 500 litres of water

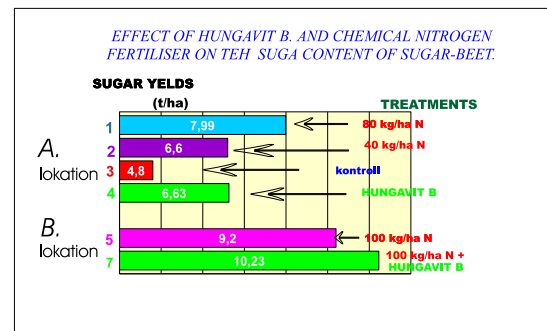
The test was carried out by Mátra Sugar Factory, Hatvan

Results: see Figure 16

The results of Location ‘A’ clearly show that it is possible to significantly decrease the amount of

artificial fertiliser with the use of **HUNGA VIT**. This is true for sugar beet, and other plant cultures as well.

Figure 16



The data obtained at Location ‘B’ proves that the application of **HUNGA VIT** is both useful and economical in intensive plant production, too. Its application resulted in more than an extra ton of sugar extract per hectare when applied with optimal quantities of artificial fertiliser, as determined by the results of soil nutrient element content inspection.

HUNGA VIT D for flowers, ornamental and house plants

The recommended application of **HUNGA VIT D** is usually a 5% solution sprayed on the plants every two weeks. Alternatively, 1 litre of **HUNGA VIT** may be dissolved in 100 litres of irrigation water. It is excellent for improving plants that are in a deteriorated condition. Plants were able to recover their original condition after stress caused by heat or drought.

As a result of the **HUNGA VIT D** treatment, ornamental plants became more compact, grew shorter joints and bigger leaves. The flowers of blossoming plants were more vivid in colour. Their tolerance to heat and drought, and resistance to disease significantly improved. Significant quality and quantity improvements can be achieved in dry flower production with its application. The effect of **HUNGA VIT D** was tested on a great variety of ornamental plants, like carnations, schefflera arboricola, codiaeum variegatum, leea guineensis, ficus elastica, and kalanchoe blosfeldiana etc.

11. Ornamental plants

Tested plant: green house carnation

Variety: Bizet, Paride, Rimini

Treatments:

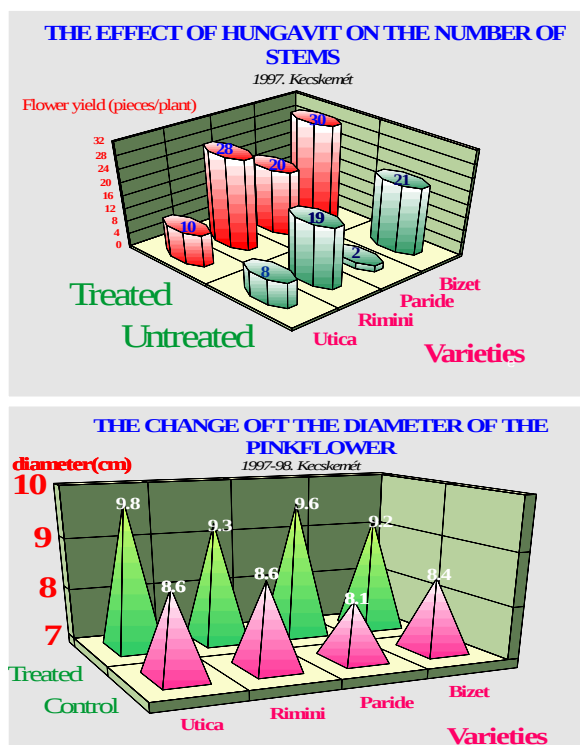
- A: control
- B: sprayed with 5% **HUNGA VIT D** solution every two weeks

The tests were carried out by the Kecskemét College of the University of Horticulture and Food Industry.

Results: see Figure 17

Figure 17

THE CHANGE OF THE NUMBER OF CARNATION PENDUNCLES UNDER THE INFLUENCE OF HUNGAVIT TREATMENT



The results show that for each carnation variety the flower yield per stem and the diameter of the full flowers increased, and their colour was more vivid. The flowers also showed a longer vase life, which significantly raised the market value of the carnations.

HUNGAVIT G for lawn, grass, pastures and certain cereals

5 l/ha of **HUNGAVIT G** should be diluted in 500 litres of water and sprayed on the plants once a month. Alternatively, 0.5% **HUNGAVIT** solution should be applied to the irrigation water. Frequent irrigation with **HUNGAVIT** solution does not harm the environment, since **HUNGAVIT** is an organic product and contains only natural materials.

12. Grasses

Tested plants: various grasses

Varieties: meadow grass, pepper grass

Treatments:

A: untreated control

B: treated with 1% **HUNGAVIT** solution

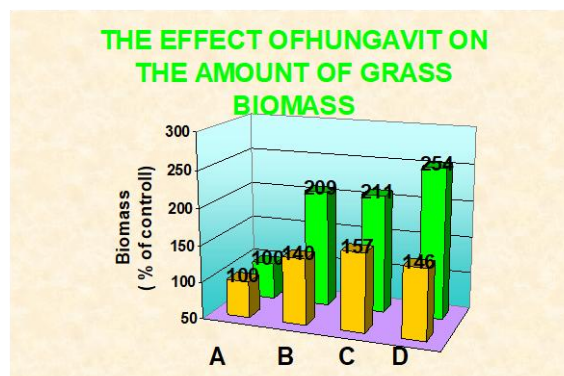
C: treated with 5% **HUNGAVIT** solution

D: treated with 10% **HUNGAVIT** solution

The tests were carried out by Bundesamt und Forschungszentrum für Landwirtschaft, Austria, 1999.

Results: see Figure 18

Figure 18



The biomass yield of the grasses tested increased by 150-250% after treatment with **HUNGAVIT**. This shows that **HUNGAVIT** makes it possible to obtain good results without the use of artificial fertilisers, making it ideally suited to organic farming. The use of **HUNGAVIT** on lawn surfaces of sports grounds and pastures makes it possible to ensure optimal conditions without damaging the environment. It can be seen that the increased concentration resulted in a yield growth, however the best relative results were attained with the 1% solution.

HUNGAVIT P for potato plants

Usual application is 5 l/ha of **HUNGAVIT** diluted in 400-600 l of water, sprayed on the plants twice during the vegetation period. The first treatment should be made at the beginning of blossoming, the second 4-6 weeks before harvest.

13. Potato

13/a Tested plant: potato

Variety: Desire

Treatments:

A: untreated, (control)

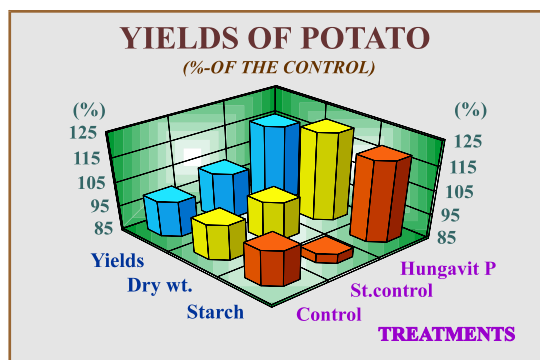
B: treated with 5 l/ha chemical fertiliser

C: treated with 5 l/ha of **HUNGAVIT** diluted in water

The tests were carried out by the Balassagyarmat Plant Protection Institute of the Ministry of Agriculture.

Results: see Figure 19

Figure 19

**13/b Early potato**

Variety: Amorsa

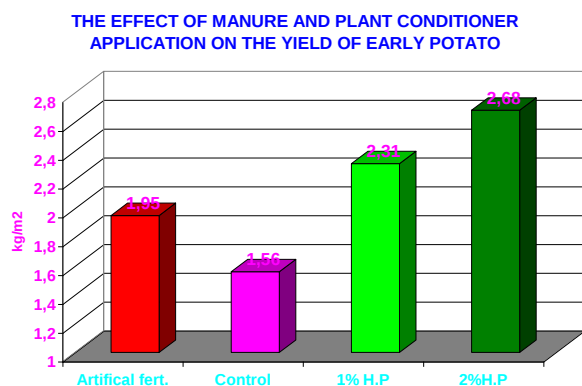
Treatments:

A: control with 4 kg/m² farmyard manure**B:** nutrient supply according to the production technology; 4 kg/m² farmyard manure, 30g/m² phosphate, 50g/m² K₂SO₄ fertiliser.**C:** B + two treatments with 1%**HUNGA VIT P****D:** B + two treatments with 2%**HUNGA VIT P**

The tests were carried out by the Kecskemét College of the University of Horticulture and Food Industry.

Results: see Figure 20

Figure 20



The experiments carried out in tropical production plots brought even more spectacular results:

13/c Potato

Variety: CKF-69.1

Treatments:

A: two treatments with 5 l/ha**HUNGA VIT P****B:** foliar fertiliser with “Miracel-Gro” ***C:** foliar fertiliser with Komix ***D:** foliar fertiliser with HVP**E:** untreated control (the usual agro-technical processes of the production area)

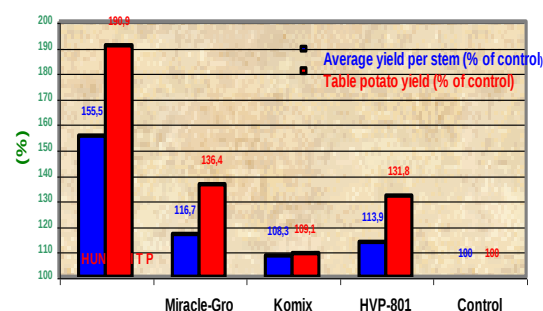
* According to the manufacturer’s instructions.

The experiments were carried out by the Institute of Agricultural Technology and Scientific Development, Da Lat, Vietnam.

Results: see Figure 21

Figure 21

ATHE EFFECT OF HUNGA VIT ON POTATO, COMPARED WITH OTHER FOLIAR FERTILISERS



The yield increase of plants treated with **HUNGA VIT P** can be described as extraordinary when compared with both the control batch and also the plants treated with foliar fertiliser. The increase is mainly the result of tuber growth. Hence, it is not only the increase in yield that is important, but since the tubers are bigger, their marketability also increases, making production even more profitable. This is basically the result of the application of **HUNGA VIT**.

Summary:

The **HUNGAVIT** product line can be used without limitation in intensive production technologies as well as in organic farming. It increases yields, improves quality and resistance of plants against disease.

IN WHAT WAY IS HUNGAVIT DIFFERENT FROM FOLIAR AND CHEMICAL FERTILISERS?

ITS COMPOSITION

It is not only a plant nutrient solution

It contains, active organic ingredients like enzymes, organic acids and inorganic salts

ITS EFFECT

It is not only a supplementary nutrient source

Its biologically active ingredients improve the condition of plants, and accordingly increase their resistance and yield, while also improving their quality.

ITS APPLICABILITY

It does not harm plants in any way

It produces outstanding results in all plant cultures even under adverse conditions. Even over-application cannot harm the plants.

ENVIRONMENTAL EFFECTS

It is not a synthetic product, hence it will not cause minor or major environmental damage

It is an extract of environmentally safe biologically active materials of natural origin.

IT IS HIGHLY RECOMMENDED FOR ORGANIC FARMING.
IT DOES NOT POLLUTE THE ENVIRONMENT

HUNGAVIT is a Hungarian and international patent trade mark.

HUNGAVIT is recommended for use in organic farming by IFOAM (International Federation for Organic Agricultural Movement), the UK Soil Association and by LACON Austria.

HUNGAVIT has received the following international awards:

- ❑ **Fair Award** at the "Genius 96" International Innovation Exhibition and Fair
- ❑ **Silver Medal** at the 1996 Beijing International Investment and Innovation Exhibition
- ❑ **Gold Medal** at the "Eureka 96" 45th Innovation and Development World Exhibition, Brussels.
- ❑ **HUNGAVIT** has received awards at all Hungarian regional exhibitions and fairs

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