



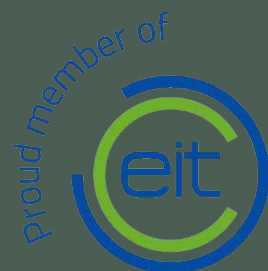
News

Slovakian soil regenerator ekolive wins sustainable innovation award WUR

InnoBioTech®

New bioleaching recipe based on bacteriocins and organic acids securing the immunity to wide spectrum of diseases

BASF INNOVATION HUB 2022 - GRAND FINALE



Food
RisingFoodStars



CA21134 - Towards zero Pesticide AGRiculture : European Network for sustainability

Co-funded by the European Union

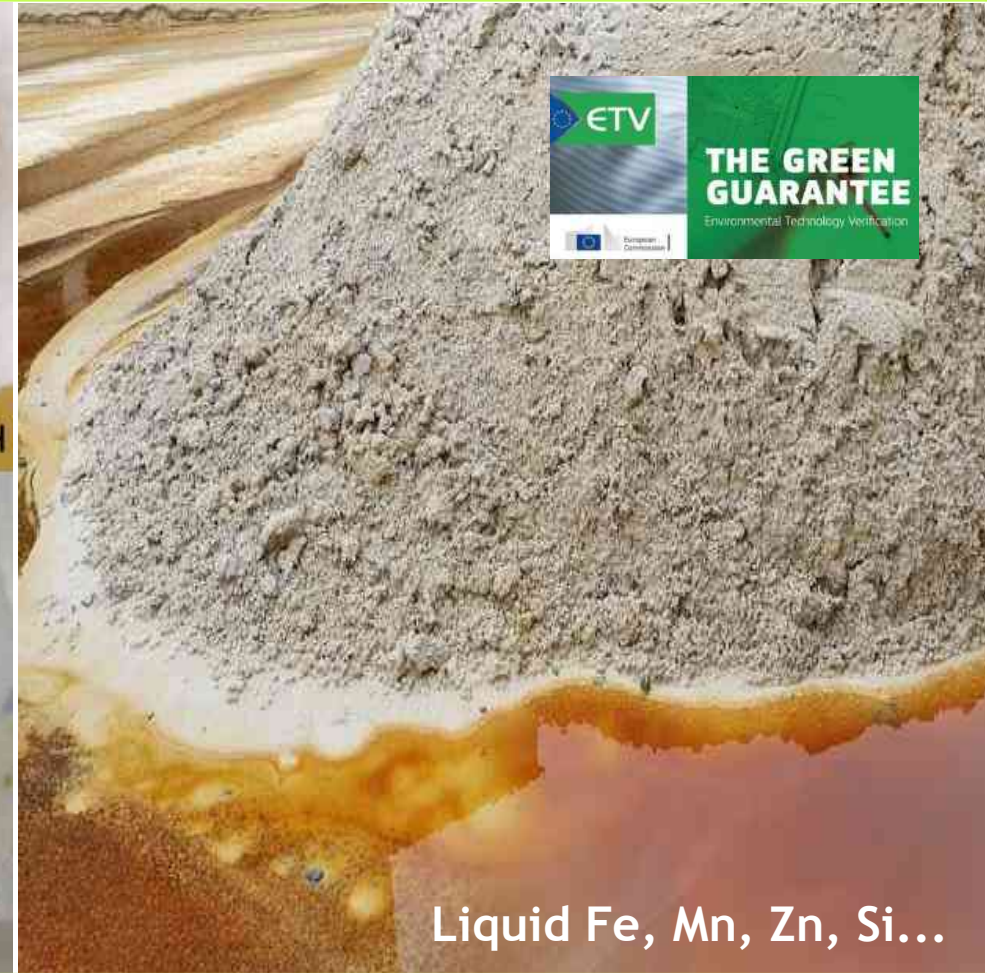
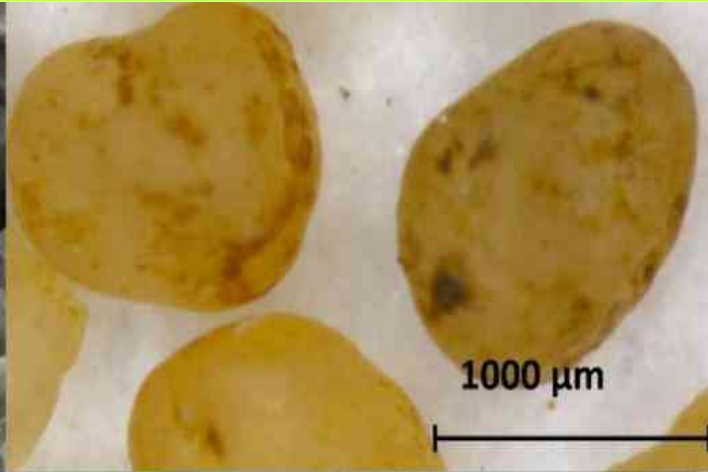
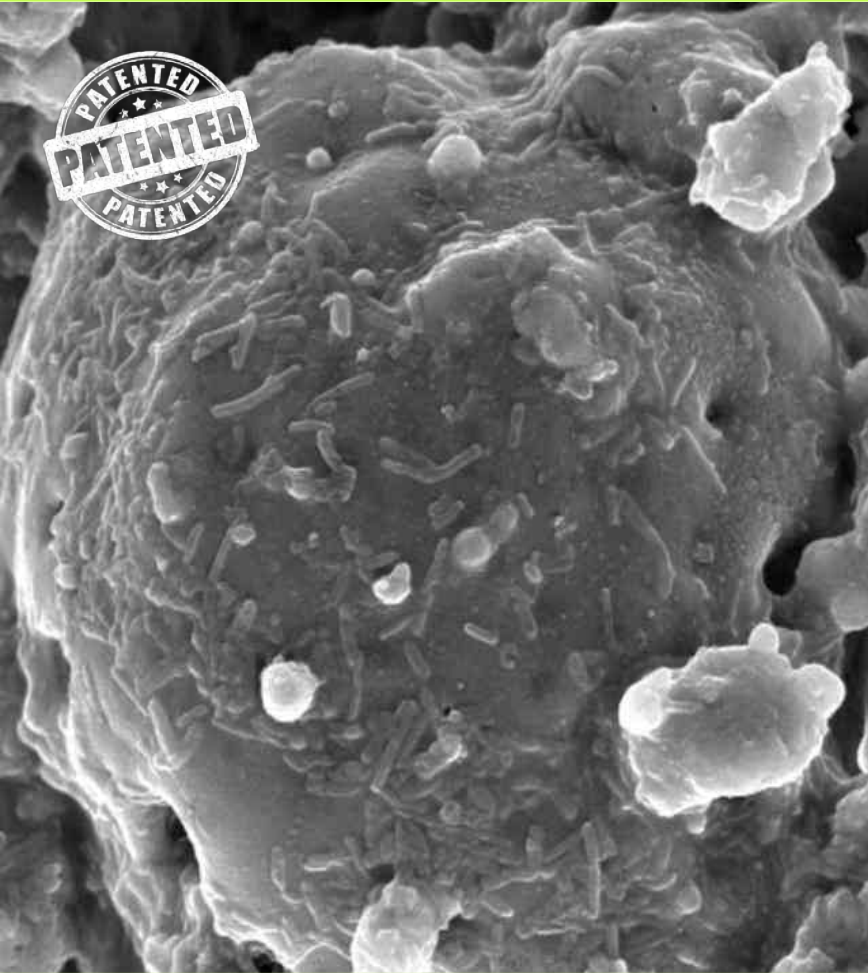




Public Health Warning in the UK: 50% of Bread Containing Potentially Hazardous Pesticide Cocktails

MONICA
PICCININI
Environment, Health & Human Rights





Probiotic bacteria & metabolites

ekofertile[®]

Minerals rich in
Fe, Mn, Co, Si

Liquid nutrients
Probiotic bacteria
Metabolites:

*lactic, butyric, acetic, propionic,
formic, fatty acids, phenyllactate,
bacteriocins, pyrrolidone-
carboxylic acid, diketopiperazines
diacetyl, reuterin, alcohols, H₂O₂,
bioactive hormones such as IAA, JA
and ABA*

Sugar - roots - immunity - heat/drought resistance

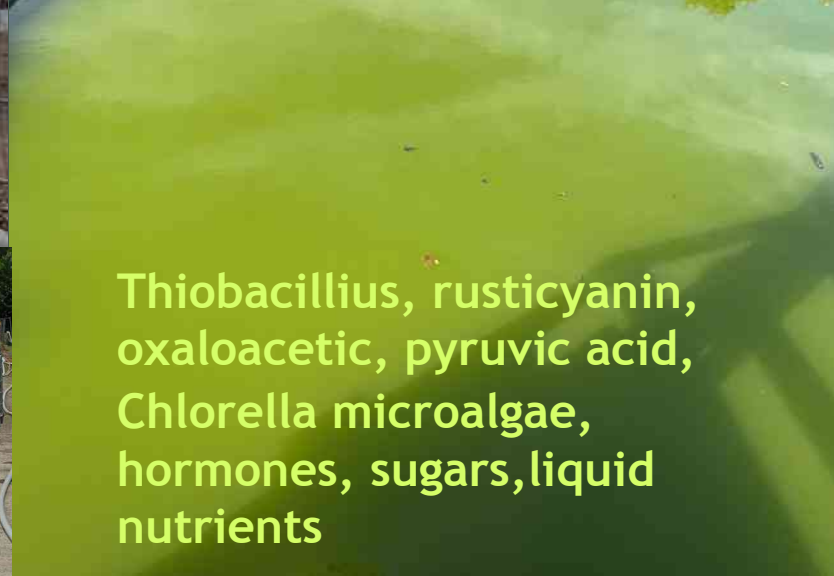


microfertile[®] Microalgae & Thiobacillus

ekolive^{.eu}
Bioleaching | Bioremediation | Biostimulants



Flour-silicified rock
rich in all essential nutrients



Thiobacillus, rusticyanin,
oxaloacetic, pyruvic acid,
Chlorella microalgae,
hormones, sugars, liquid
nutrients



Oil - protein - chlorophyll - frost/cold resistance

Composition



Trained bacterial symbioses that support plant growth, fix N, CO₂



**Effective metabolites:
Org. acids, hormones, alcohols,
bacteriocins, proteins**



**Dissolved natural minerals:
Fe, Mn, Co, Zn, Mg, S, C...**

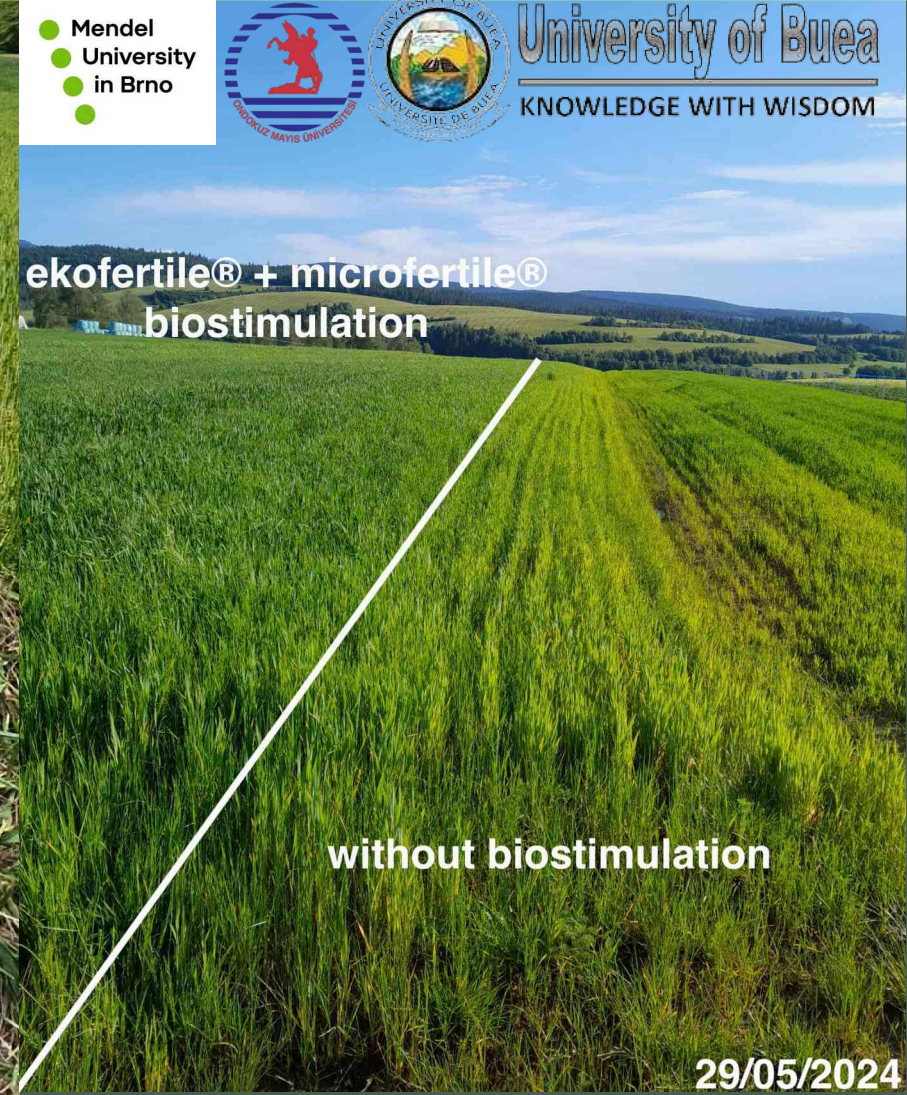
Effects of the bio | me | stimulants



Mendel
University
in Brno



University of Buea
KNOWLEDGE WITH WISDOM



Chlorophyll and yield



Ondokuz Mayıs University, Faculty of Agriculture, Department of Soil Science and Plant Nutrition, Samsun, Türkiye.



University of Buea
 KNOWLEDGE WITH WISDOM

Department of Agronomic and Applied Molecular Sciences,
 Faculty of Agriculture and Veterinary University of Buea.



	Total Chlorophyll (mg/g)
Control	1.96 ^e
Inorganic fert.	2.54 ^c
5% <i>ekofertile</i> ®	2.56 ^c
10% <i>ekofertile</i> ®	3.02 ^a
5% <i>microfertile</i> ®	2.8 ^b
10% <i>microfertile</i>	3.03 ^a

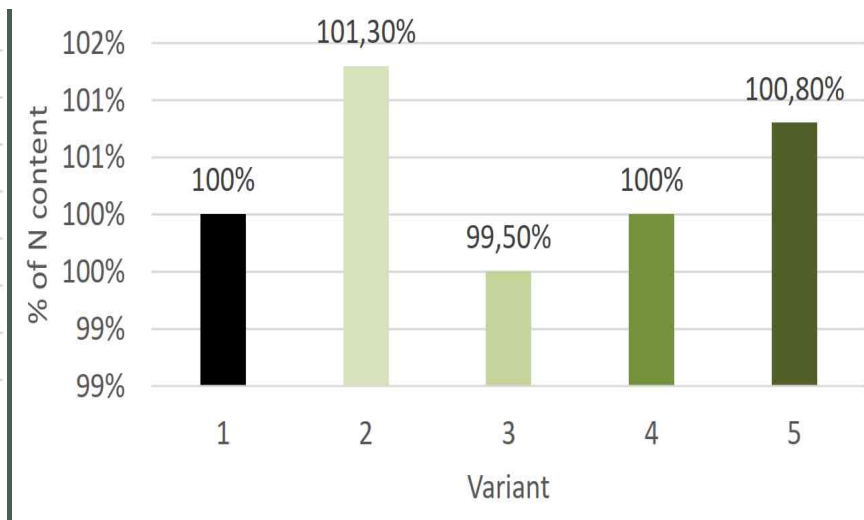
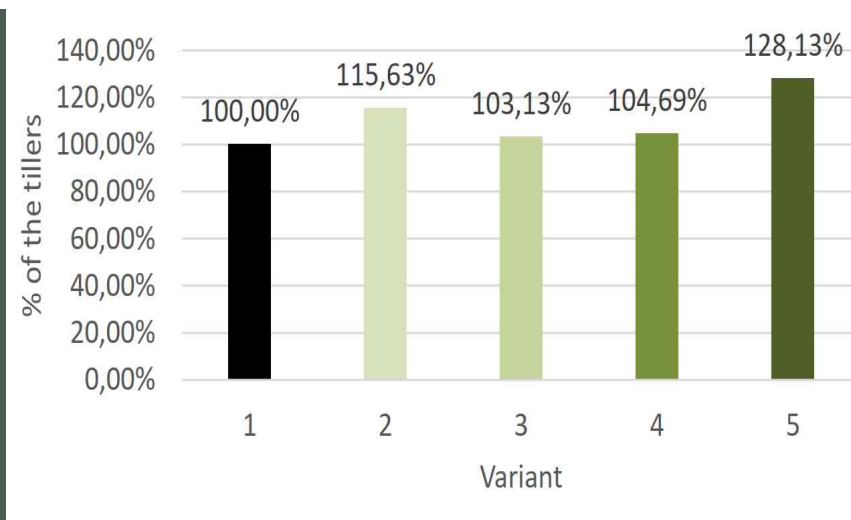
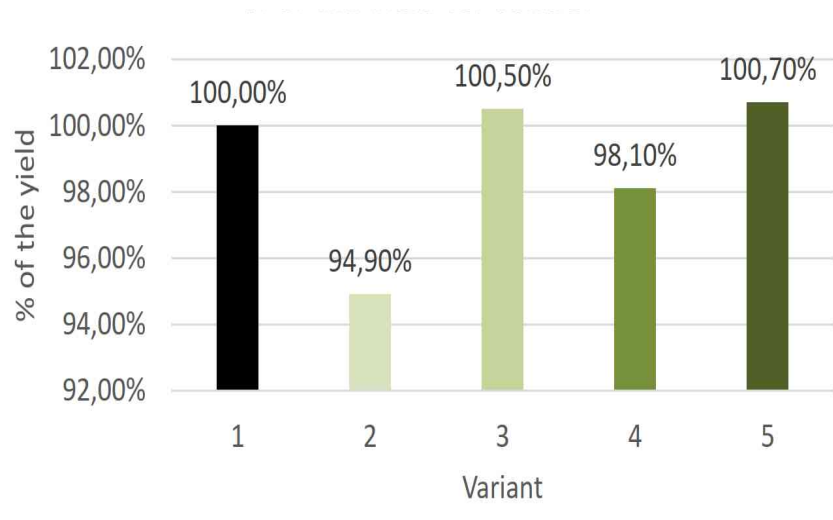
	1000 grains weight (g)	Grain yield (t/ha)	Biological yield (t/ha)	Head weight (g)	Grains number	Grains weight (g)	Plant height (cm)	Leaf area (cm ²)	Biomass (g)
Control	63.7 ^a	7.3 ^a	19.66 ^a	1.90	23	1.46	69.6	41.03	60.3
Inorganic fert.	71.2 ^a	9.1 ^a	22.38 ^a	2.08	26	1.82	74.0	45.8	64.5
5% <i>ekofertile</i> ®	70.0 ^a	9.2 ^a	22.13 ^a	2.42	27	2.0	74.8	46.0	68.2
10% <i>ekofertile</i> ®	74.4 ^a	10.8 ^a	25.01 ^a	2.84	35	2.34	75.4	46.5	85.0

Full replacement of N, Fungicides



FIELD TESTS OF COMMERCIAL PRODUCTS EKOLIVE BIOSTIMULANTS

Mendel University in Brno, Faculty of AgroScience



High pressure of wheat stripe rust (*Puccinia striiformis*), replaced fungicide (prothioconazole + trifloxystrobin)

Yield

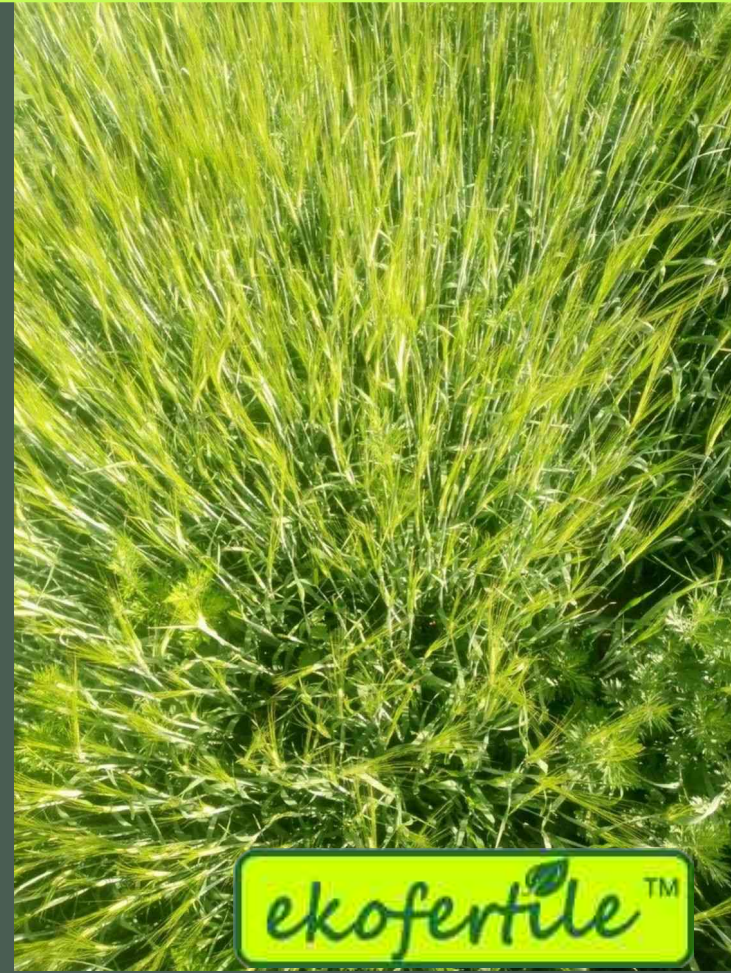


Kenya Plant Health
Inspectorate Service

ekolive.eu
Bioleaching | Bioremediation | Biostimulants



Growth



Immunity (common scab) and yield



without

ekofertile™




without

ekofertile™




Yield increase, no pesticides



 EKOLIVE

New posts ▾

 **Majko Rimský**
19 July at 13:37 · 🌐

Ecofertile pays off!
obr. 1 potato without applying ecofertile
obr. 2 potatoes after three continuous applications of ekofertile 🙌

The fields are about 20 meters apart from each other, i.e. the same climate and soil conditions were the same for both fields but the difference is obvious. We applied it twice last year and the potato yield was about 25% bigger than usual. We are definitely satisfied with ekofertile and can only recommend 😊

[⚙️ Hide Translation](#) · [🗳️ Rate this translation](#)

Potatoes pathogens – scientific. lit.

Disease	Pathogens
Late blight	<i>Phytophthora infestans</i>
Early blight	<i>Phytophthora infestans</i> , <i>Alternaria solani</i> , <i>A. grandis</i> , <i>A. alternata</i>
Fusarium wilt and Fusarium dry rot	<i>Fusarium ambucaine</i> , <i>F. solani</i> , <i>F. graminearum</i> , <i>F. oxysporum</i>
Verticillium wilt	<i>Verticillium</i> spp.
Powdery scab	<i>Spongospora subterranean</i> , <i>Streptomyces</i> spp.
Bacterial wilt	<i>Ralstonia solanacearum</i>
Soft rot/blackleg disease complex	<i>Pectobacterium</i> , <i>Pectobacterium Brasiliense</i> , <i>Dickeya</i> , <i>R. solanacearum</i>
Common Scab	<i>Streptomyces scabiei</i> , <i>S. acidiscabiei</i> , <i>S. turgidiscabiei</i>
Zebra chip disease	<i>Candidatus Liberibacter solanacearum</i>

Volume 45, Part 8, 2021, Pages 7725-7733

In vitro antifungal activity of *Lactobacillus* against potato Late blight *Phytophthora infestans*

Karima Alaoui ^a, Zouheir Chafik ^b, Mourad Arabi ^c, Houssam Abouloifa ^a, Abdeslam Asehraoui ^a, Jabir Chaoui ^a, Ez-Zahra Kharmach ^a

Environmental and Experimental Biology (2020) 18: 7–13
<http://doi.org/10.22364/eeb.18.02>

Original Paper

Antifungal activity of lactic acid bacteria against *Fusarium* species responsible for tomato crown and root rots

Nebia Zebboudj¹, Wassim Yezli^{1,2*}, Nisserine Hamini-Kadar¹, Mebrouk Kihal¹

Int J Environ Res Public Health. 2023 Mar; 20(6): 5221.

Published online 2023 Mar 22. doi: [10.3390/ijerph20065221](https://doi.org/10.3390/ijerph20065221)



ISSN 2255-9582



PMCID: PMC10049107

PMID: [36982130](https://pubmed.ncbi.nlm.nih.gov/36982130/)

Metabolite Formation by Fungal Pathogens of Potatoes (*Solanum tuberosum* L.) in the Presence of Bioprotective Agents

Aleksandra Steglińska^{1,2*}, Michael Sulyok³, Regina Janas⁴, Mieczysław Grzesik⁴, Wiktoria Liszkowska¹, Dorota Kregiel¹ and Beata Gutarowska¹

Lactic Acid Bacteria as Biocontrol Agents against Potato (*Solanum tuberosum* L.) Pathogens

August 2022 · *Applied Sciences* 12(15):7763

DOI: [10.3390/app12157763](https://doi.org/10.3390/app12157763)

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Lab: Dorota Kregiel's Lab

Aleksandra Steglińska · Artur Kołtuniak · Ilona Motyl · [Show all 9 authors](#) · Beata Gutarowska

100% of the *Lactobacillus* tested showed an antifungal effect

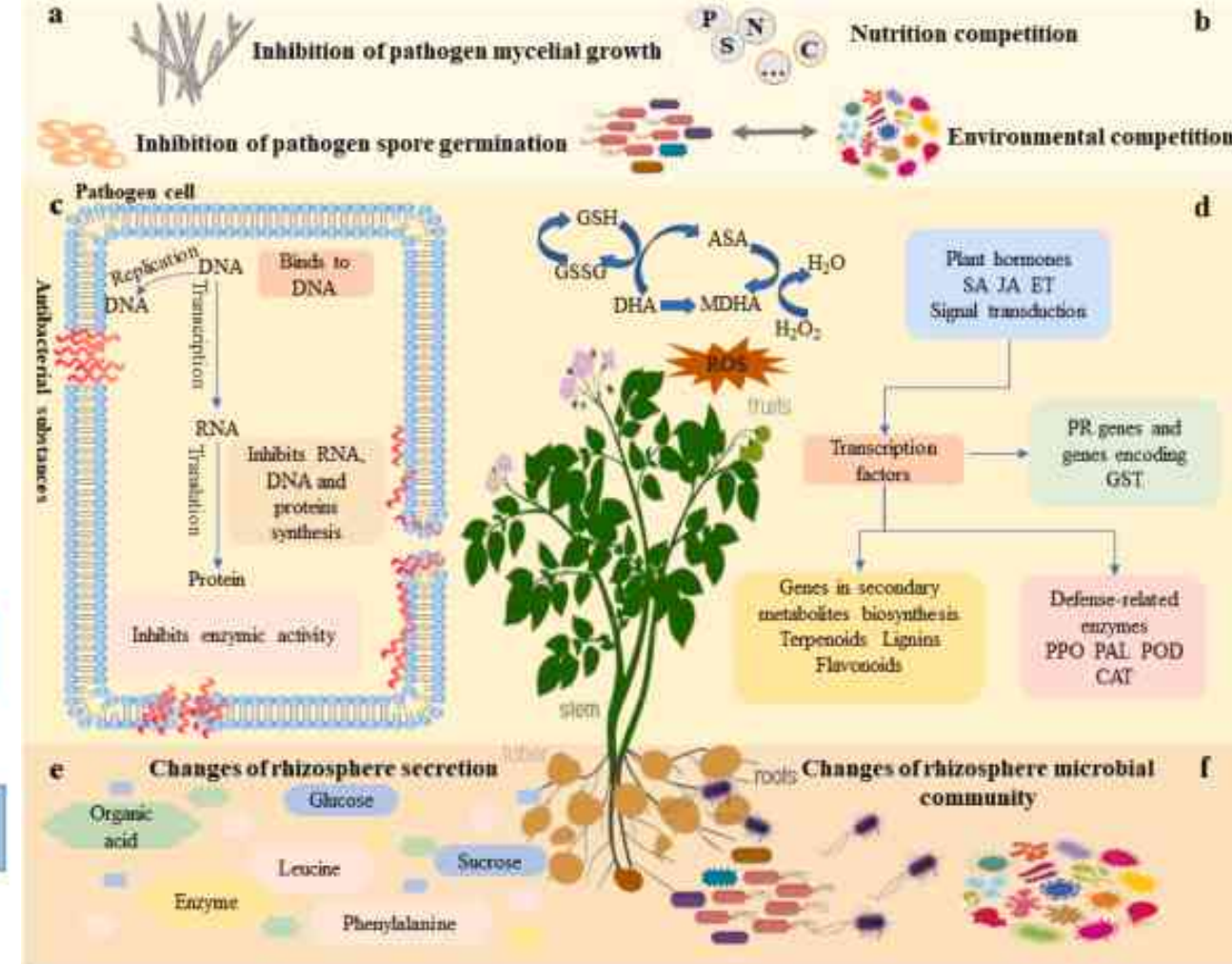
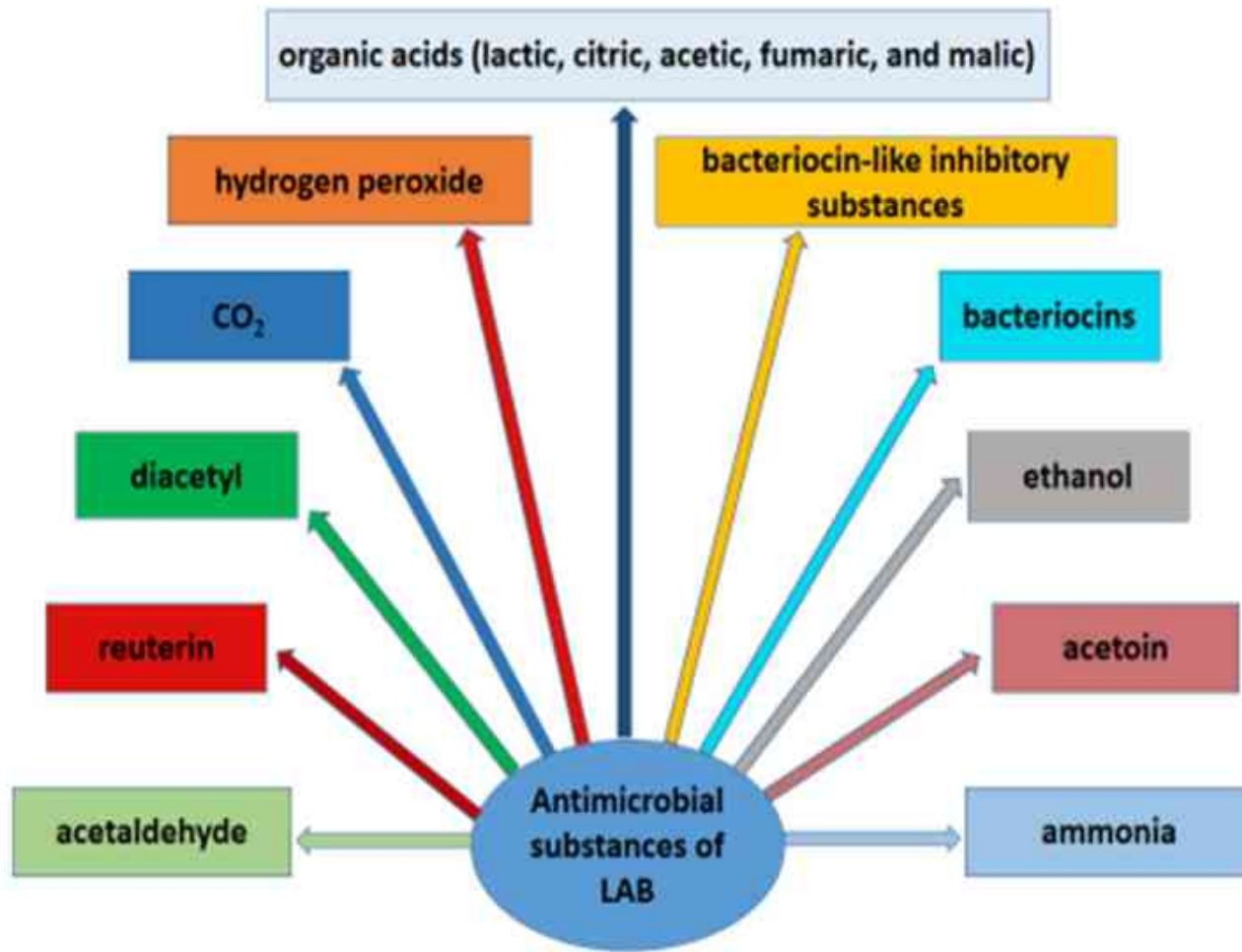
against *P. infestans*. All *Lactobacillus* tested had a fungistatic effect on spore germination and mycelial growth, except *L. b. brevis* 14 and *L. b. plantarum* 62 which had a fungicidal effect on mycelial growth.

Results showed that **all LAB used can significantly reduce growth of various phytopathogenic *Fusarium* species, both by cell cultures and by their secondary metabolites.**

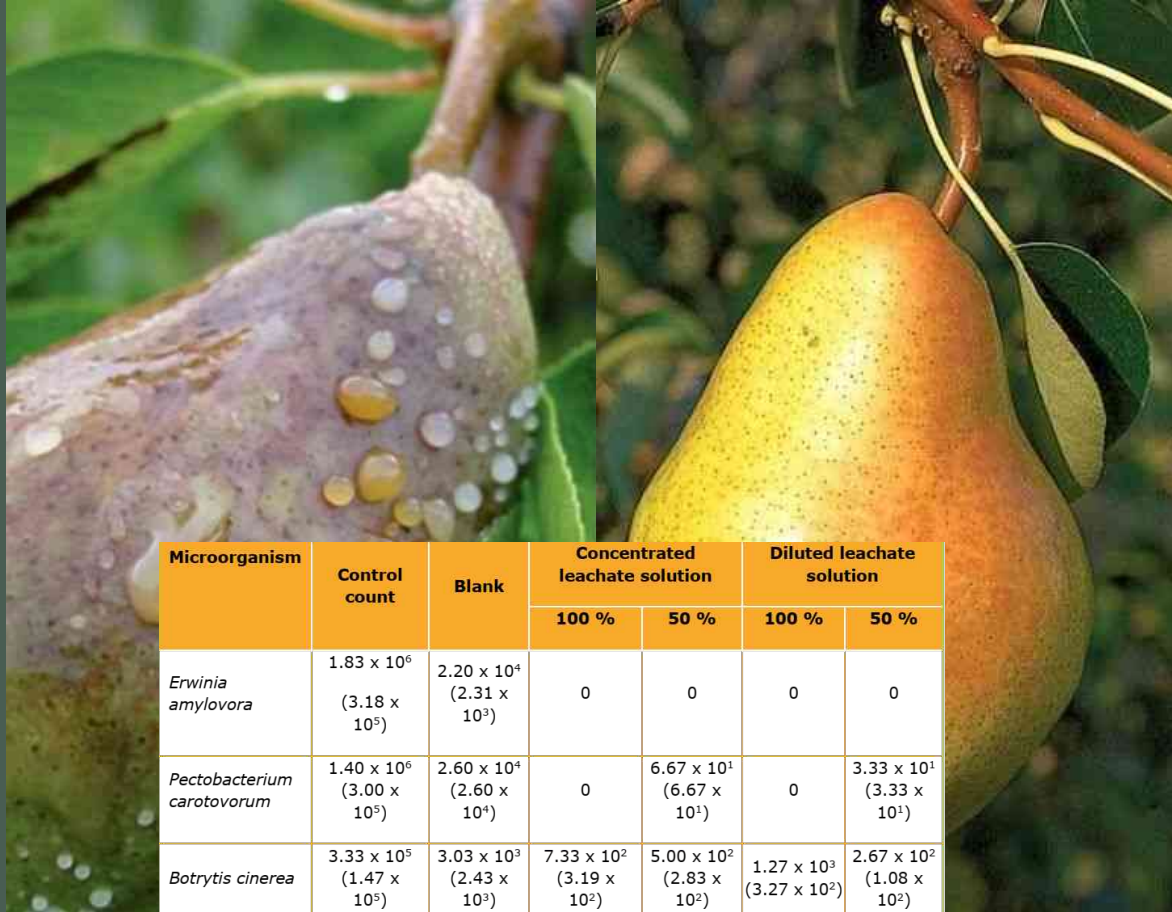
The studies showed that the applied biocontrol agents had a positive effect on the physiological parameters of potatoes (including root growth, stem growth, gas exchange, and chlorophyll content index) and on the **reduction in the production of mycotoxins** and other secondary metabolites by *Fusarium*, *Alternaria*, and *Phoma*.

LAB strains against ten phytopatogens: *Pectobacterium carotovorum*, *Streptomyces scabiei*, *Fusarium oxysporum*, *Fusarium sambucinum*, *Alternaria solani*, *Alternaria tenuissima*, *Alternaria alternata*, *Phoma exigua*, *Rhizoctonia solani*, *Colletotrichum coccodes*. **The test showed a 40–90% reduction of eight potato pathogens infestation**; LAB strains were proposed as the potential biocontrol agent for the potato protection against phytopathogens.

Antimicrobial substances of LAB



Immunity to bacteria, viruses, fungi



Microorganism	Control count	Blank	Concentrated leachate solution		Diluted leachate solution	
			100 %	50 %	100 %	50 %
<i>Erwinia amylovora</i>	1.83×10^6 (3.18×10^5)	2.20×10^4 (2.31×10^3)	0	0	0	0
<i>Pectobacterium carotovorum</i>	1.40×10^6 (3.00×10^5)	2.60×10^4 (2.60×10^4)	0	6.67×10^1 (6.67×10^1)	0	3.33×10^1 (3.33×10^1)
<i>Botrytis cinerea</i>	3.33×10^5 (1.47×10^5)	3.03×10^3 (2.43×10^3)	7.33×10^2 (3.19×10^2)	5.00×10^2 (2.83×10^2)	1.27×10^3 (3.27×10^2)	2.67×10^2 (1.08×10^2)



before



Immunity, yield drought resistance



ekofertile™

ekofertile™

Increasing immunity against fungal diseases (Botrytis)

The average value of Furmint grapes increased by 22.6%

The average weight of Lipovina grapes increased by 24.5%

5.4% increase in sugar (Furmint)

Increase in yield by 7.5% (Furmint)



without

without

Immunity, yield



Treatments	Fruit weight	Fruit yield
microfertil 5%	116.47%	152.61%
ekofertil 10%	126.25%	160.02%
50% NPK, microfertil and ekofertil 5%	119.66%	107.55%
Control 100 % NPK	100%	100%



	Bacteria	Fungi	Actinobacteria	Azotobacter	Pseudomonas
Control	30,82	7,72	49,48	70,60	0,70
ekofertil 10%	62,98	13,82	221,64	1,10	28,53



**DOBRY
JEZKO**



Growth



without

ekofertile™



Root system



Size from 35g to 55g



No pesticides residues!



ekolive
Bioleaching | Bioremediation | Biostimulants



Size increased by 11,53 %

Weight increased by 21,57 %

Sugar increased by 20 %

ekofertile™

Growth



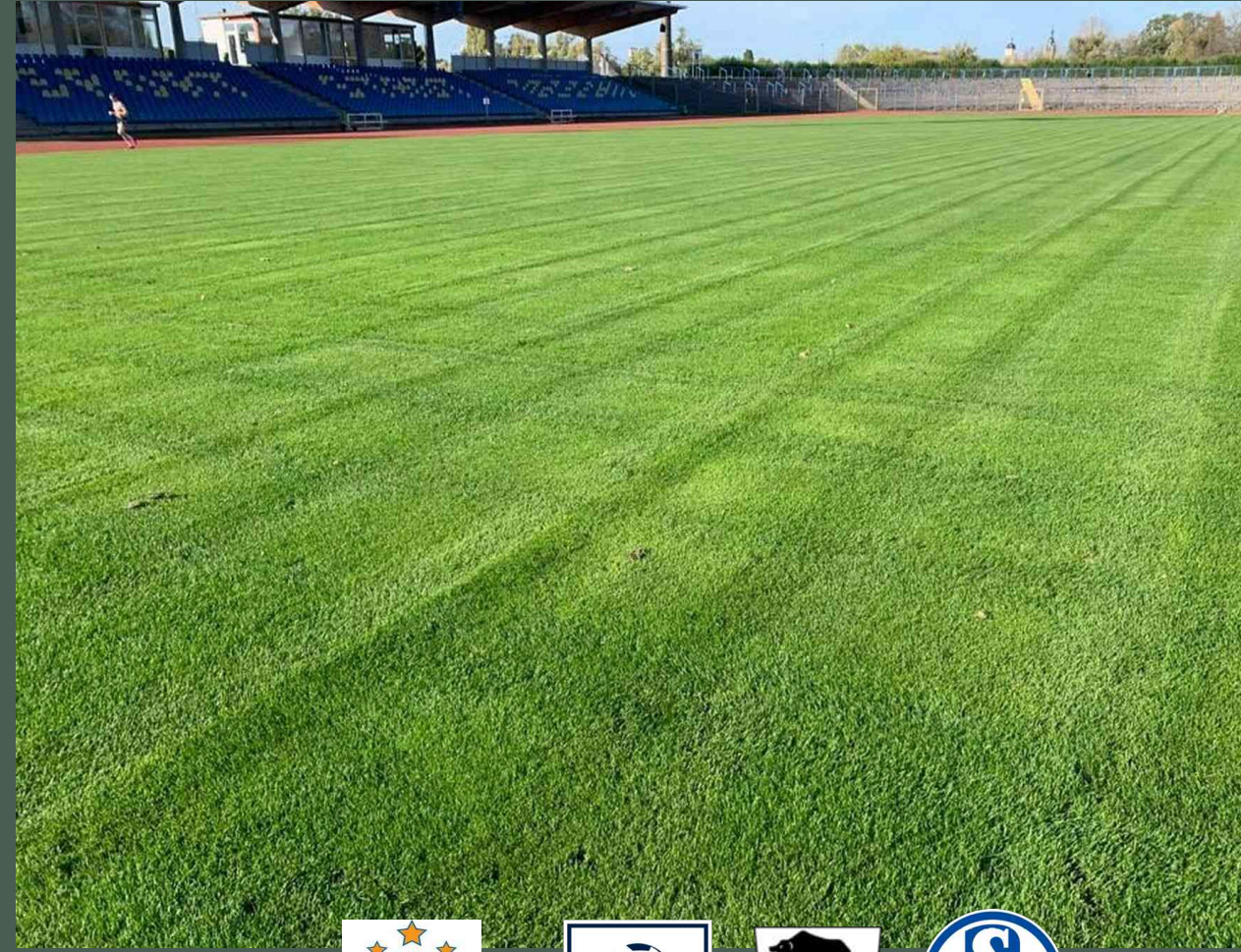
Size and sugar, no pesticides !



Transition to eco-production



Root system, immunity to fungi



Nutrients increase, less virus



Dr. B. Pottmann
 Gartenbauberatung
 Labor
 ISO 9001:2015 zertifiziert

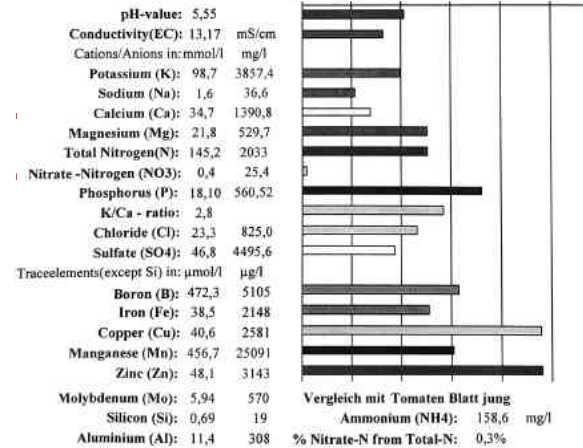


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Plantsapanalysis Report

Identification: Cmp 11 young
 Testing date: 05.08.2022

culture: Brioso A



Dr. B. Pottmann
 Gartenbauberatung
 Labor
 ISO 9001:2015 zertifiziert



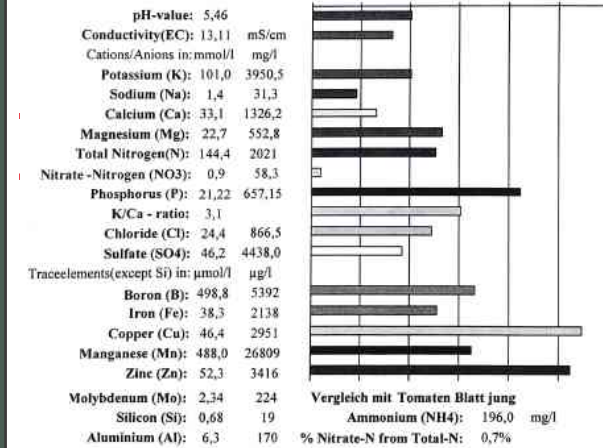
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Plantsapanalysis Report

Identification: CMP 12 young
 Testing date: 05.08.2022

culture: Brioso A



Yield, shelf life increase



Kwame Nkrumah University of Science and Technology (KNUST)

Cucumber yield - 33,33 t/ha to 130,55 t/ha

Shelf life from 15 to 23,3 days



Okra yield - 11,11 t/ha to 45,28 t/ha

Increase sugar by 1,24 t/ha, profit by 250€

Variant	cukornat.	úroda repy	úroda cukru	poradie
	%	t/ha	t/ha	úroda cukru
kontrola	16,78	69,70	11,70	2.
ekofertile plant	17,19	75,25	12,94	1.



Nordzucker.
Spolu.
Udržateľne.

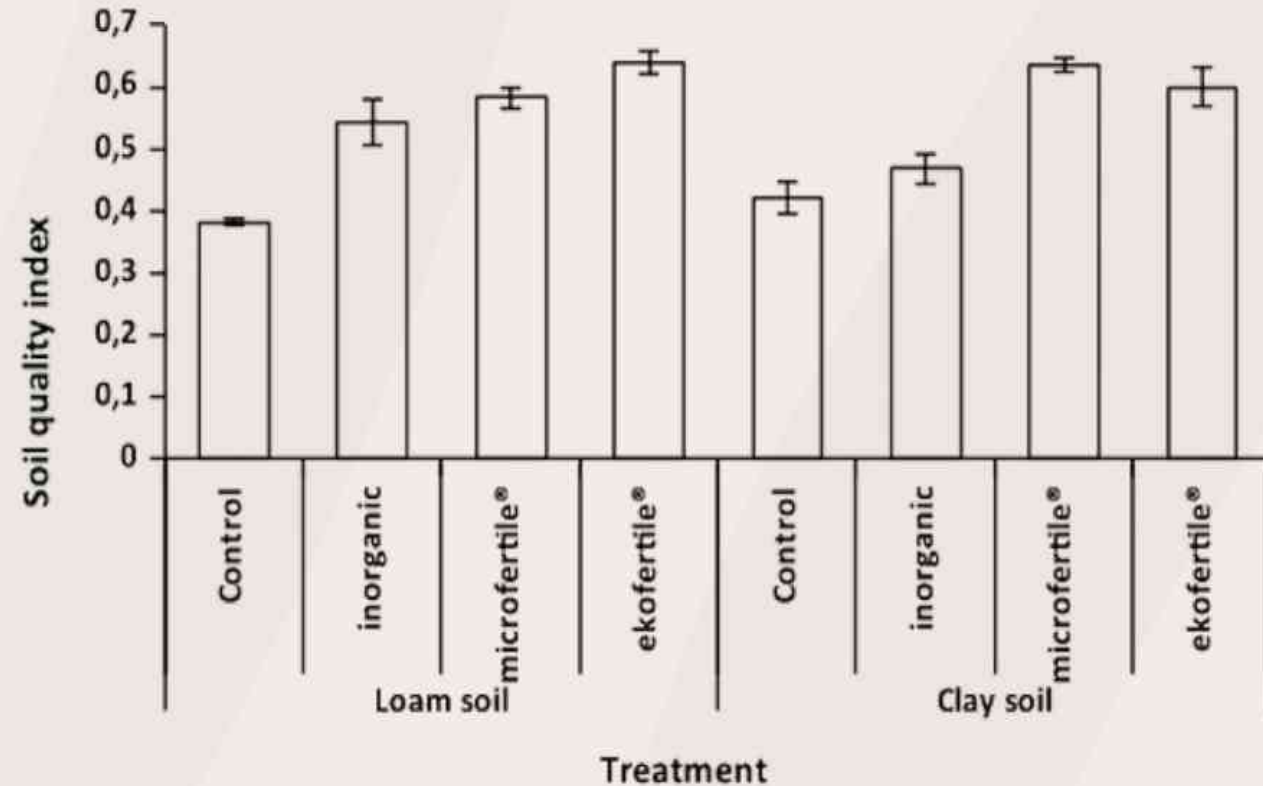
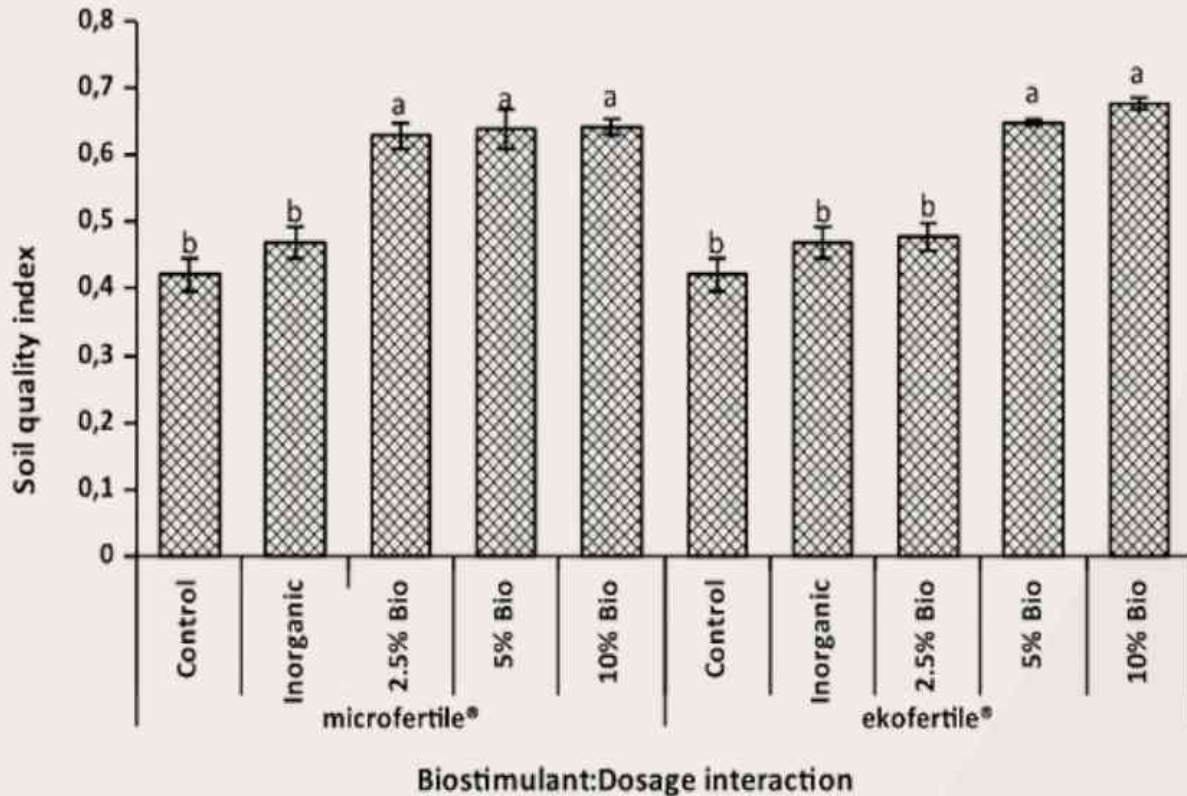
Ekofertil plant

- Porovnanie variantov a poradie úrody cukru prvý rok pokusu v Nových Sadoch

Variant	cukornat.	úroda repy	úroda cukru	poradie
	(%)	t/ha	t/ha	úroda cukru
kontrola	16,78	69,70	11,70	2.
Ekofertil plant	17,19	75,25	12,94	1.



Soil quality index



Soil parameters



Ondokuz Mayıs University, Faculty of Agriculture, Department of Soil Science and Plant Nutrition, Samsun, Türkiye

Department of Agronomic and Applied Molecular Sciences, Faculty of Agriculture and Veterinary University of Buea, Cameroon

loam soil	pH	EC (μscm^{-1})	Ca	Mg (meq/100g)	Na	K	CaCO ₃	OC %	OM	N	DHA μgTPFg^{-1}	Cmic 100g ⁻¹	mg CO ₂ -C ⁻¹	BSR $\mu\text{g CO}_2\text{-Cg}^{-1}$	SQI	Biological yield (t ha ⁻¹)
Control	7.78 ^{bc}	714 ^a	64.7 ^a	13.6 ^a	1.20 ^a	1.75 ^d	12.12 ^a	2.54 ^a	4.38 ^a	0.25 ^a	36.57 ^a	18.63 ^a	0.093 ^{bc}	0.38 ^a	19.66 ^a	
Inorganic fert.	7.71 ^d	678 ^{abc}	68.4 ^a	14.9 ^a	1.26 ^a	1.87 ^{bc}	13.61 ^a	2.75 ^a	4.74 ^a	0.29 ^a	50.75 ^a	22.10 ^a	0.089 ^c	0.54 ^a	22.38 ^a	
5% <i>ekofertile</i> [®]	7.87 ^a	667 ^{abc}	67.0 ^a	19.0 ^a	1.40 ^a	1.93 ^{ab}	13.02 ^a	3.04 ^a	5.23 ^a	0.28 ^a	55.35 ^a	27.96 ^a	0.103 ^a	0.69 ^a	22.13 ^a	
10% <i>ekofertile</i> [®]	7.91 ^a	702 ^{ab}	71.6 ^a	21.3 ^a	1.42 ^a	1.99 ^a	14.53 ^a	3.07 ^a	5.29 ^a	0.29 ^a	55.51 ^a	27.54 ^a	0.121 ^a	0.64 ^a	25.01 ^a	
5% <i>microfertile</i> [®]	7.74 ^{cd}	694 ^{ab}	66.9 ^a	18.6 ^a	1.46 ^a	1.82 ^{cd}	13.43 ^a	2.91 ^a	5.02 ^a	0.27 ^a	60.42 ^a	24.48 ^a	0.100 ^a	0.61 ^a	21.56 ^a	
10% <i>microfertile</i> [®]	7.77 ^{bc}	595 ^d	69.7 ^a	20.8 ^a	1.43 ^a	1.82 ^{cd}	13.77 ^a	2.99 ^a	5.16 ^a	0.28 ^a	55.81 ^a	23.28 ^a	0.096 ^a	0.60 ^a	23.92 ^a	

Partnerships



Exciting Partnership Announcement: Joining Forces with Ekolive for Organic Farming

We are thrilled to announce our partnership with Ekolive, a leading Slovakian company, in our shared mission to promote organic farming practices. This collaboration marks a significant step forward in our commitment to sustainable agriculture and environmental stewardship.



SUCCESSFUL RESULTS IN NIGER (AFRICA) – PEPPER PLANTS

- ✓ The harvest was weeks earlier than previous seasons
- ✓ The quantity of fruits is increased – from the usual 4-6 to amazing up to 21 fruits per plant!
- ✓ The size of the fruits is bigger
- ✓ The fruits were classified as more tasty



IMPORT AND SALES CERTIFICATE NIGER (AFRICA)



Import Agreement Retail sales Agreement Wholesale Agreement

VICTORY ORAGNICS NIGER has been registered on the 02/06/2023 in Niamey under the register Number NE-NIM-01-2023-B13-00316



The 'Regen Ag Enablers'

Soil Intelligence and Management



Alternative Fertilisers

Agroforestry and Reforestation



Soil Restoration and Carbon Sequestration



SOILCAPITAL



MRV Technologies

Precision Agriculture



BioConsortia



Microbial Soil Health Improvement

Regenerative Farming Platforms



firstmilk

CIBO

Reduce the use of agrochemicals by using the replication of the natural formation of soil and nutrition of plants

www.ekolive.eu

