Soil fertility regulator Gumogel (





Who we are

OUR COMPANY DEVELOPS ENVIRONMENTALLY FRIENDLY FERTILIZERS WITH UNIQUE PRODUCTION TECHNOLOGY THAT ALLOWS TO OBTAIN A HIGH CONTENT OF ACTIVE ORGANIC MATTER IN THE COMPOSITION

WE PRODUCE

HIGH QUALITY ORGANIC
GROUNDS AND SUBSTRATES

ECOLOGICALLY CLEAN
REGULATORS AND REPLENISHERS
OF SOIL FERTILITY

PEAT BASED PLANT GROWTH STIMULATORS

We have the manufacture in the Tver region for the production of organic fertilizers of our own design. We produce any peat compositions, humates and soil ameliorants, according to the individual requirements of the customer.

OUR PHILOSOPHY

Our philosophy is based on the principles of organic farming. The amino acids, which are the active substances in our products, are obtained with minimal impact on natural raw materials. We don't use chemical treatment methods, we don't create waste requiring disposal.

Our products don't harm the environment, they don't contaminate the soil and they don't create a carbon footprint. At the same time, the use of our products improves soil structure, stimulates the natural processes of plants growing, and creates favorable conditions for natural biocoenosis.

OUR MISSION

TO PROVIDE FARMERS WITH AN EFFECTIVE TOOL TO REPRODUCE SOIL FERTILITY AND REDUCE THE USE OF CHEMICAL FERTILIZERS.

The product's purpose

GUMOGEL, CONTAINS NATURALLY SYNTHESIZED AMINO ACIDS, IS ENVIRONMENTALLY FRIENDLY AND HAS THE FOLLOWING EFFECT ON THE MATERIAL TO BE TREATED:

STIMULATES ACCELERATED ROOT FORMATION AND INCREASES THE GERMINATION ENERGY OF PLANTING MATERIAL

PROVIDES A PROTECTIVE EFFECT ON SPROUTS IN CASE OF UNFAVORABLE ENVIRONMENTAL FACTORS

IMPROVES IMMUNITY AND REDUCES
THE RATE OF PLANT DISEASES

USED FOR THE PRODUCTION OF ORGANIC FARMING PRODUCTS

IMPROVES SOIL STRUCTURE

DOES NOT POLLUTE THE SOIL AND DOES NOT CONTAIN ARTIFICIALLY SYNTHESIZED CHEMICAL COMPOUNDS

REDUCES THE CONSUMPTION OF MINERAL FERTILIZERS WHEN USED TOGETHER

RESTORES CONTAMINATED LAND FOR AGRICULTURAL USE

USED TO FORM AN ARTIFICIAL SOIL LAYER

REGENERATES DEGRADED SOIL

Application area

- 1. THE REGULATOR IS USED IN AGRICULTURAL INDUSTRIAL PRODUCTION, ON SOILS WITH INSUFFICIENT HUMUS, AS WELL AS TO REPLENISH FERTILITY DURING INTENSIVE USE OF AGRICULTURAL LAND.
- 2. IN THE URBAN ECONOMY FOR
 THE REHABILITATION OF
 CONTAMINATED LAND OF
 ROADSIDES AND LAWNS, AS WELL
 AS A PLANT GROWTH STIMULANT.
- 3. DURING RECLAMATION WORKS ON THE CREATION OF ARTIFICIAL SOIL, AS A SOIL-FORMING AGENT.

TYPES OF CROPS, THE USE OF GUMOGEL SOIL FERTILITY REGULATOR IS RECOMMENDED



SPRING AND WINTER CEREALS (WHEAT, BARLEY, OATS, RYE)



ZUCCHINI



APPLE TREES



GRAPES



RAPE, BITTERCANE (WINTER AND SPRING)



CUCUMBERS



PEAR



RASPBERRY



ALFALFA, FORAGE GRASS MIXTURES, LAWN GRASS MIXTURES



CABBAGE



PLUM



CURRANT



CORN



ONIONS



PEACH



HONEYSUCKLE



GRAIN LEGUMES
(SOYBEANS, LENTILS, BEANS)



CARROTS



CHERRY



GOOSEBERRY



SUNFLOWER



GARLIC



BUCKTHORN



GUELDER ROSE



WALNUT



RADISH



QUINCE



WATERMELON



POTATOES



LETTUCE



ALYCHA



MELON



TOMATOES



SUGAR BEET



CORNEL



PUMPKIN



EGGPLANTS



CITRUS FRUITS

APPLYING OF GUMOGEL

on wheat

The development and implementation of the GUMOGEL product are carried out under the control of the laboratory of humic substances and organo-mineral compounds of the Department of Soil Chemistry, Faculty of Soil Science, Lomonosov M.V. Moscow State University.

AS A RESULT OF THE EXPERIMENTS THE PODUCT HAS SHOWN THE FOLLOWING RESULTS



The wheat yield in the "control" experiment with the introduction of mineral fertilizers was 25.6 c / ha. Complex treatment with the GUMOGEL soil, seeds and plants, at a drug concentration of 4 liters. per hectare, increased the yield of the test crop by 69.2% compared to the control (43.3 c / ha) "

INCREASING WHEAT YIELDS BY

69,2%

INCREASED GLUTEN CONTENT BY

6,9%

APPLICATION OF GUMOGEL INCREASED THE PERCENTAGE OF PROTEIN CONTENT IN GRAIN BY

 $\overline{6,7\%}$

AS A RESULT, THERE WAS AN INCREASE IN THE CLASS OF GRAIN

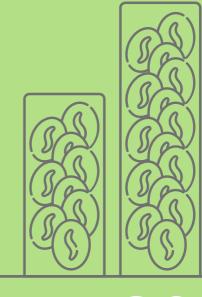
EXPERIENCE ON GERMINATION OF WHEAT SEEDS

(soft grade "moscow 39" gost p 52325-2005)



THE LENGTH AND WEIGHT OF THE SEEDLINGS INCREASED BY

180%



THE NUMBER OF GERMINATED SEEDS INCREASED BY

30%

APPLYING OF GUMOGEL

on tomatoes

SCHEME OF APPLICATION:

OBTAINED RESULT:

Mineral fertilizer solutions based on potassium monophosphate, potassium and ammonium nitrate with a concentration of nutrients N180P135K60, i.e. containing 180 mg of nitrogen, 135 mg of phosphorus and 60 mg of potassium in 1 liter of solution.

Yield of test crop in the control variant of the experiment was 23 fruits (6431.8 g)

Solutions based on GUMOGEL (0.1 g/l).

Yield of tomatoes in the experiment №2 with application of only working solutions of GUMOGEL was 82.5% of the control variant (or 19 fruits with total weight of 4913.9 g).

Combined working solution based on the GUMOGEL (0.1 g/l) and mineral fertilizers (N180P135K60).

The maximum result in the experiment was obtained in the experiment N° 3 with a combined irrigation of test culture with organic and mineral fertilizers - 46 fruits total weight 12185.3 g (or 89.5% more compared with control variant).

fruit weight +89,5%

*These tests were carried out by the Lomonosov Moscow State University.

+45,1%

Increase in total yield per unit area in the variant with the rate of 4.0 I/ha by 21% and 45.1% compared to control variant









Increase in fruit weight by 4.5g and 32g with high marketability of fruits in the variant with the concentration of agrochemical 4.0 l/ha

Tendency to improve the majority of biochemical indicators of tomato fruits.

^{*}These tests were carried out by Kazan State Agrarian University.

APPLICATION OF GUMOGEL

on potatoes

SCHEME OF APPLICATION:

FOLIAR APPLICATION

1 FEEDING

in the phase of 5-7 leaves

2 FEEDING

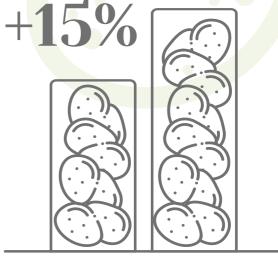
in the phase of budding, the consumption 2 I/ha].

OBTAINED RESULT:



In variants with the application of the **GUMOGEL** in the tested doses the content of dry matter in tubers increased by 9.4 %

The application of the agrochemical GUMOGEL in doses of 2.0 I/ha increased the total marketability of tubers [sum of two fractions: > 60 mm + (30-60 mm)] to 388.5 g / bush. The yield of seed potatoes increased.



In the variant NPK + soil fertility regulator GUMOGEL practical result was obtained, in which the increase was 2.73 t/ha or 15.0% of the control result.

*These tests were carried out by Kazan State Agrarian University.

APPLICATION OF GUMOGEL

on lettuce

Evaluation of the efficiency of the soil fertility regulator of humic peat "gumogel" application in the vegetation experience of cultivation of lettuce with the complex treatment of soil, seeds and vegetative organs of test crop plants with working solutions of the fertility regulator, GUMOGEL increases the yield of lettuce. The fixed result is 136.3% more than in the control variant of the experiment.

OBTAINED RESULT

+136,3%





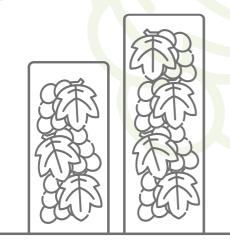
*These tests were carried out by the Lomonosov Moscow State University.

APPLICATION OF GUMOGEL

on grapes

SCHEME OF APPLICATION:

Out of root feeding or spraying during vegetation, 3-4 times during flowering and vegetation.



OBTAINED RESULT

The improvement of growing conditions of the plants in the vineyard, located on the southern coast of Crimea, created with the fourfold application of GUMOGEL, at a rate of 4.0 l / ha during the period "shoots 15-20 cm.", "before flowering of grapes", "berry size of small peas", "active berry growth, softening", reducing stress on the background of low humidity, high average daily temperature, had a positive effect on increasing bush yield (by increasing the weight of one berry and the number of formed full-grown berries in the bunch). The difference with the control, 0.96 kg / bush (12.3%), is reliable.

12,3%

Ministry of Science and Higher Education of the Russian Federation Federal State Budgetary Scientific Institution "All-Russian National Research Institute of Viticulture and Winemaking "Magarach" RAS" 2019

THE APPLICATION OF HUMIC PEAT "GUMOGEL", AT A RATE OF 4.0 L/HA TOGETHER WITH FOLIAR FERTILIZERS WUXAL, ALLOWED US TO REDUCE THE RATE OF FERTILIZERS WUXAL MICROPLANT, WUXAL BORON, WUXAL AMINOPLAST, WUXAL CALCIUM, WUXAL AMINOCAL BY 20%, WITHOUT REDUCING THEIR ECONOMIC EFFICIENCY.

THE DIFFERENCE WITH THE REFERENCE VARIANT (100% WUXAL FERTILIZER RATE) IS NOT SIGNIFICANT, WITHIN THE MARGIN OF ERROR.

The composition

DETERMINED INDICATOR	MEASUREME NT RESULT	MEASUREMENT ERROR	UNITS
ARSENIC			
BORON			
CADMIUM	0,008	0,002	
COBALT			
CHROMIUM			
COPPER			
IRON			
POTASSIUM			
MANGANESE			
MOLYBDENUM			
NICKEL	0.683	0.102	
PHOSPHORUS			
PLUMBUM		0.016	
ZINC			
TOTAL NITROGEN			
HUMIDITY	85.8		
DRY RESIDUE			
CINDER			
LOSS ON TEMPERING		0.18	
HUMID ACIDS			
FOLIC ACIDS	8.8		
HUMIN N.O.			
SILICIC ACID (IN TERMS OF SILICON)		10,0	
ORGANIC MATTER			

How to apply

AS AN AQUEOUS SOLUTION FOR:



PRESOWING SOAKING
OR MACHINE SEED
TREATMENT



SPRAYING OR WATERING



IT IS APPLIED TO THE SOIL WITH THE AGRICULTURAL EQUIPMENT USED FOR REGULAR FERTILIZERS



DIPPING PLANT ROOTS



The use of GUMOGEL is allowed in conjunction with UAN (urea-ammonium mixture) and other mineral and organic fertilizers. In this case, the applied amount of these fertilizers can be reduced by 20-30% of the usual amount. It is permissible to use GUMOGEL in conjunction with chemical plant protection products.

Individual programs

WHEN GROWING CROPS

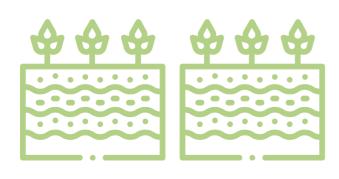


The product is a chelating agent and has the ability to bind metal atoms, which allows to supply plants with microelements for their development and growth. Depending on the crop, we can change the composition and amount of microelements such as manganese, iron, copper, boron, zinc and molybdenum. This makes farming more efficient and economical.

WHEN RESTORING DEGRADED SOILS

The intensive biostimulating effect of the GUMOGEL product can be used to restore degraded soils due to intensive use or exposure to environmental factors.

The introduction of GUMOGEL leads to the fact that humic substances, which are the main active ingredient of the product:



- by enveloping, gluing together the mineral particles of the soil, contribute to the creation of a very valuable water-tight cloddy-grained structure, improving the water permeability and water retention capacity of the soil, its air permeability.
- have the ability of gelation. Due to this quality, after soil treatment with GUMOGEL, its water-holding capacity increases.

WHEN RESTORING CONTAMINATED SOILS

A special series of GUMOGEL, with increased content of undistributed carbon, acts as a strong activator of soil formation and is capable of transforming infertile soils such as sand or loam into structured soil-like bodies in 6-8 months.

GUMOGEL is effective in the creation of urban soils, fertile soil mixtures for agricultural purposes (constructozems, greenhouse soil, etc.), sloping slopes for roads and ravines.

GUMOGEL can be successfully used as a soil modifier in the remediation and reclamation of eroded and contaminated soils.







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