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# We care about environmental protection

The microorganism stabilisation technology developed by Bacto-Tech enables us to offer formulations that are highly effective without the need for toxic chemicals. The microorganisms in our products naturally support the crop and promote better plant growth, as well as accelerating the biological decomposition of pollutants.

Each preparation produced by Bacto-Tech contains a high concentration of microorganisms, making our bioproducts not only environmentally friendly but also highly efficient. Specially selected bacterial strains, sourced from natural habitats in Poland, are characterised by high metabolic activity and efficacy. The microorganisms present in Bacto-Tech preparations are not genetically modified and their use does not affect the environment. Numerous of our products have been approved by Institute of Soil Science and Plant Cultivation State Research Institute – in Puławy, Poland for use in organic farming.

# We research and test

## in practice

Our company has its own laboratory facilities where we develop Bacto-Tech biopreparations. Each product is always tested under natural conditions to check its effectiveness in practice. The finished biopreparations are thoroughly tested to exclude the presence of pathogens, such as *Salmonella* or *E. coli*, to ensure the greatest possible safety. Our bio drain cleaners are also hygienically certified by National Institute of Public Health NIH – National Research Institute.

In addition to this, we also provide professional research and development services, including the design of new products or the improvement of existing products, as well as the realisation of fully documented expert opinions. You can find out more about our services and past implementations in the RESEARCH SERVICES section (page 22).





## Meet the Bacto-Tech scientific team

Bacto-Tech is a Polish company that was created by a team of researchers at the Nicolaus Copernicus University in Toruń who have specialised in environmental microbiology and biotechnology for over twenty-five years. Young and dynamic microbiologists and biotechnologists have also joined the team. Therefore our scientific team combines experience with creativity.



## BactoRol Nitrogen

## Microbial fertiliser product supplying easily absorbable nitrogen

- increases the nitrogen concentration in the soil
- stimulates growth
- enhances plant growth
- guarantees a healthy, high-quality crop

#### Action of BactoRol Nitrogen:

- BactoRol Nitrogen is a microbial fertiliser product providing plants with easily absorbable nitrogen from the atmosphere.
- The product contains a mixture of bacteria selected from European soils, 3 species of bacteria of the Bacillus genus assimilating nitrogen and Azotobacter vinelandii at a concentration of at least 10° cfu/ml.
- It fixes between 35 and 50 kg of nitrogen per hectare of land per year.
- · Reduces nitrogen fertilisation by approximately 20-30%.

#### Composition:

Bacteria assimilating atmospheric nitrogen at a concentration of ≥ 1 000 000 000 cfu/ml.

- Dilute 11 of the product in 200-4001 of water and spray over an area of 1 ha.
- In field crops with simultaneous ploughing or other cultivation, as a pre-sowing ground spray.
- In vegetable crops, pre-sowing or before planting as a soil treatment.
- · In orchards as a spray in the herbicide strip.
- · The preparation does not require activation.
- · The working fluid should be used within a few hours.
- · The preparation should not be applied during prolonged drought.
- · Shake vigorously before use!







## **BactoRol Plus**

## Ecological microbiological mixture for accelerated decomposition of soil organic matter

- accelerates decomposition of crop residues
- increases humus and nutrient content
- helps reduce fertiliser costs



#### Action of BactoRol Plus:

- BactoRol Plus is a microbial mixture that accelerates the decomposition of organic matter in the soil, such as crop residues, manure or catch crops.
- The Bacillus bacterial strains used in BactoRol Plus, selected from European agricultural soils, accelerate the decomposition of plant and animal residues, making the biogenic elements contained in organic matter available to plants.
- Their high biological activity increases the humus and nutrient content of the soil, thereby improving its retention function and reducing nutrients washing out.
- The application of the preparation also improves plant health and crop quality.
- BactoRol Plus also increases the water holding capacity
  of the soil, and thus makes plants more resistant to drought.
- · Has a positive effect on crop growth.
- · Safe for the environment.

#### Composition:

5 strains of saprophytic bacteria from the *Bacillus* genus at a concentration  $\geq$  5 000 000 CFU/ml.

#### Directions for use:

- Dilute 11 of the product in 200-4001 of water and spray spraying on an area of 1 ha.
- The preparation should be applied with simultaneous ploughing or other cultivation.
- · The product should not be used during prolonged drought.
- In order to accelerate decomposition of organic residues, the product is best applied immediately after harvesting.
- · Can be applied in spring before sowing or planting.
- · The preparation does not require activation.
- · The working liquid should be used within a few hours.
- · Can be used together with fertilisers and plant protection products.
- Shake vigorously before use!

The product has a certificate for use in organic farming No. SE/10/2018 issued by IUNG-PIB in Puławy, PL





## **BactoFos**

## Ecological microbiological product stimulating phosphate release in soil

- stimulates the release of plant available phosphates
- improves the rooting of plants and increases yields
- increases soil fertility and reduces fertiliser costs



#### Action of BactoFos:

- When the product is introduced into the soil, the bacteria contained in BactoFos gradually break down the calcium phosphate contained in the soil.
- The increase in phosphate concentration has a beneficial effect on the proper development of plants, and the increased biological activity of the soil supports their proper rooting.
- The action of BactoFos is based on natural metabolic processes

   the use of the preparation does not entail any risk of overfertilisation and reduces the need for phosphate fertilisers.
- BactoFos can be used simultaneously with phosphorus fertilisation - the formulation then significantly accelerates the release of phosphates in soil and increases their concentration by up to 200%.
- · The preparation is natural and safe for the environment.

#### Composition:

The preparation contains a mixture of bacteria of the genus *Bacillus* at a concentration of  $\geq 1\,000\,000\,000\,\text{cfu/ml}$ .

#### Directions for use:

- Dilute 1 litre of BactoFos in 200-400 l of water and use to spray over the area of 1 hectare.
- · Apply with simultaneous ploughing or other cultivation.
- · Do not apply during prolonged drought.
- · Can be used with fertilisers and plant protection products.
- · The formulation does not require activation.
- · The working fluid should be used within a few hours.
- · Shake vigorously before use!

The product has a certificate for use in organic farming No. SE/9/2018 issued by IUNG-PIB in Puławy, PL.





## **BactoViN**

## Microbiological plant growth stimulant

- supplies plants with readily available nitrogen from the atmosphere for most of the growing season
- allows mineral fertilisation to be reduced by 20-30% without loss of yield
- fixes 35 to 50 kg of nitrogen per hectare per year
- has a positive effect on yield quality and quantity



#### Action of BactoVin:

- · BactoViN is a microbial fertiliser product.
- It contains a high concentration (10° cfu/ml) of Azotobacter vinelandii, selected from European soils, which assimilate atmospheric nitrogen

#### Composition:

Azotobacter vinelandii at a concentration ≥ 1 000 000 000 CFU/ml.

- 0.5-1 I of the product should be diluted in 200-400 I of water and sprayed over an area of 1 ha.
- In field crops: with simultaneous harrowing, ploughing or in the field: with simultaneous harrowing, ploughing or other treatment, as a pre-sowing ground spray.
- For vegetable crops: pre-sowing or before planting as a soil spray.
- · In orchards: pre-sowing or before planting as soil spray.
- · The product does not require activation.
- · The working fluid must be used within a few hours.
- · Do not apply during drought.
- · Shake vigorously before use!





## **BactoStym**

## Microbiological growth biostimulant for plants

- stimulates plant growth and development
- increases yield and improves crop quality
- improves the rooting of plants

#### Action of BactoStym:

- BactoStym is designed to stimulate growth, development and yield of various plant species.
- It contains selected microorganisms of the genus Bacillus that synthesise plant hormones and other active substances categorised as substances promoting plant growth and yield.
- BactoStym can also be introduced as a bioadditive to liquid mineral fertilisers, organic fertilisers and other fertigationdistributed solutions.
- The formulation can also be used as a foliar fertiliser in various agricultural, vegetable and fruit crops.
- The preparation is particularly recommended for the cultivation of solanaceous crops (peppers, tomatoes), for which a significant improvement in yield quality (increase in vitamin C and β-carotene concentrations) and soft fruits (strawberries and berries).
- The effect of BactoStym is based on natural metabolic processes the application does not entail any risk of over-fertilisation.







#### Directions for use:

- The preparation should be applied as a liquid introduced in the area around the root ball or as a foliar spray
- $\cdot$  1-3 treatments per growing season are recommended.
- Can be used with foliar fertilisers and plant protection products. Do not use with products containing copper oxychloride and other bactericides.
- To soil: dilute 11 of the product in 200-400 l of water and spray over an area of 1 ha.
- Foliar spray: dilute 1 litre of the product in 100-150 litres of water. If necessary, increase the amount of water up to 500 litres to allow even coverage of the entire plant
- In fertigation systems, BactoStym should be applied as a 0.1% solution.

#### Soil and foliar application:

- First rees: apple, pear, cherry, plum, peaches
- Fruit bushes: raspberries, highbush blueberries, strawberries
- Vegetables: carrot, parsley, leek, onion, tomato, pepper, excumber, cabbage
- Ornamental plants

#### In fertigation systems:

- Fruit bushes: raspberry, highbush blueberry, strawberry
- Vegetables: tomato, pepper, cucumber, lettuce, carrot, pars ley, leek, onion, brassica
- The preparation does not require activation.
- The working liquid should be used within a few hours.
- The preparation should not be applied during a drought.
- The formulation is natural and safe for the environment.



## **BactoFungi Stop**

## Soil microbiological balance restorer

- stimulates vegetative and generative growth
- supports the regeneration of plants after a stress factor
- affects crop growth and quality



#### Action of BactoFungi Stop:

- BactoFungi Stop is a microbial fertiliser product containing microorganisms of the genus Bacillus.
- The product supports the proper development of plants and restores the microbiological balance of the soil.
- Isolated from European soils, the bacteria present in BactoFungi Stop colonise the surface of plant tissues, which causes formation of a natural biofilm limiting the pressure of biotic stress factors.
- BactoFungi Stop increases plant vigour and improves the efficiency of their nutrition.
- · Reduces chemical residues in the crop

#### Composition:

Bacillus amyloliquefaciens DW1A at a concentration  $\geq$  1 000 000 000 cfu/ml, Bacillus subtilis DW2S at a concentration  $\geq$  1 000 000 000 cfu/ml.

- The product should be applied as a liquid either directly to the soil around the root zone or as a foliar spray.
- · 1-3 treatments per growing season are recommended.
- · Can be used with foliar fertilisers and plant protection products.
- $\cdot$  Do not use with bactericidal products.
- Soil application: dilute 11 of the product in 200-4001 of water and spray over an area of 1 ha.
- Foliar: dilute 1 I of the product in 100-150 I of water or more to allow even coverage of the entire plant.
- · Spray at a rate that allows even coverage of the entire plant.
- · The preparation does not require activation.
- Use the working fluid within a few hours.
- The preparation should not be applied during prolonged drought.







## FabaStym series

## Symbiotic bacteria for seed inoculation of faba bean plants

- symbiosis with the root system of faba bean plants
- plant-available nitrogen from the air
- up to 500 kg of nitrogen per hectare per year
- more and better quality of the crop



#### FabaStym action:

- The symbiotic bacteria in the FabaStym range coexist with the root system of faba bean plants.
- Rhizobia are involved in the formation of nodules on the roots and provide assimilable nitrogen to the plant by fixing atmospheric nitrogen (N<sub>2</sub>) from the air and making it available to the plant in an assimilable form (NH<sup>4+</sup>), allowing a significant reduction in the use of nitrogen fertilisers.
- The efficiency of N<sub>2</sub> fixation ranges from 200 to as much as 500 kg/N per hectare in one year, thereby increasing the amount of nitrogen in the soil available for plant successor plants.
- The symbiosis of rhizobia with faba bean plants has a beneficial effect on yield increase, high protein content of the seeds and plant resistance to stress caused by unfavourable environmental conditions.
- In addition, the formation of root nodules improves soil structure.
- Seed inoculation with rhizobia is recommended because the symbiotic bacteria of some faba bean crops (e.g. soybean, faba bean, lupin and others) are absent or very low in abundance in most soils.

#### Composition:

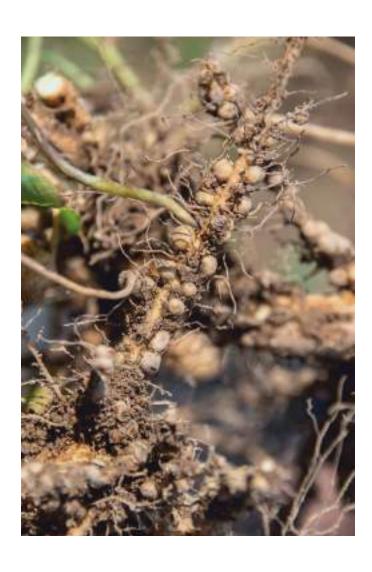
Symbiotic bacteria of faba bean plants at a concentration of 1  $000\,000\,000\,\text{CFU/g}$ .

- FabaStym formulations are designed to be applied directly to the seed of faba bean crops or to inoculate the soil before sowing.
- For soil inoculation, dissolve the preparation in 200-300 I of water and spread as a spray over an area of 1 ha.
- Moisten the seed with water at a rate of approximately 1% by weight of the seed.
- · The seeds must be moist but not dripping wet.
- The seed preparation should then be mixed (in a mixer or concrete mixer) so that the dressing evenly coats the seeds.
- Detailed dosages are given in the leaflets of the individual preparations.



# Formulations in the FabaStym range are designed for inoculation of the following plants:

- FabaStym Vicia peas, field beans, broad beans, lentils, vetches
- FabaStym Combo seradella, lupin
- FabaStym Soya soy
- FabaStym Alfa lucerne
- FabaStym Trifolii clover
- FabaStym Galega galega





## RhizoPlus

## Microbial preparation stimulating the root system growth

- biological product for seed treatment of arable plants and grasses
- stimulates growth of the root system
- reduces negative effects of drought stress

#### Action of RhizoPlus:

- RhizoPlus is a microbial product stimulating the growth of the root system of cultivated plants.
- The Bacillus bacterial strains used in RhizoPlus, selected from the best cultivated soils, stimulate the development of the plant root system and also reduce the negative effects of drought stress through their growth promoting action.
- The calcium phosphate solubilising bacteria present in the formulation make an additional pool of phosphate ions available to the plants from the moment of germination, enhancing the development of the root system.
- Arbuscular mycorrhizal fungi of the genus Glomus establish a symbiotic endomycorrhizal system, which stimulates the development of the root system and assists in the uptake of water and minerals from the soil.
- · Contains calcium phosphate solubilising bacteria
- · Improves the uptake of water and minerals



#### Composition:

Bacillus bacteria and arbuscular mycorrhizal fungi at a concentration of ≥ 1 000 000 000 cells per gram.

- Moisten the seeds with water at a rate of approximately 1 per 100kg of seed (the seeds must be maist, but not dripping wet) and then mix the seed preparation in a mixer at a rate of 1 kg of dressing per 100kg of seed so that the dressing covers the seeds evenly.
- The formulation is intended to be applied directly to the seeds of cultivated plants
- · Preparation used in cereals, maize, rape, grasslands, lawns





## Agro SanitoBac

## Microbiological preparations for slurry and manure

- liquefies contaminants and eliminates sediments
- eliminates odours and reduces foaming
- makes it easy to pump out the tank contents



#### Action of Agro SanitoBac:

- · Agro SanitoBac STARTER and Agro SanitoBac CONTINUER are biopreparations of natural origin
- · They are designed for use in slurry or manure tanks from pig and cattle farms and on manure pads.
- They improve the breakdown of contaminants and liquefy the contents of the tank, as well as reduce sedimentation, forming and sludge formation.
- · The use of preparations makes it easier to pump out the contents of the tank and significantly reduces adours.

#### Agro SanitoBac STARTER

#### Composition:

The formulation contains a mixture of live saprotrophic microorganisms at a concentration of more than 10 000 000 000 CFU/g.

#### Directions for use:

- · Mix the contents of the pack thoroughly in 10 l of water.
- · Leave for 10-12 hours.
- · Pour the prepared solution into the tank.
- The product should be applied at least once, 3 months before the tank is emptied.
- $\cdot$  A packet of product is sufficient for a 100 m<sup>3</sup> tank.

**NOTE**: After using Agro SanitoBac STARTER, a maintenance dose of Agro SanitoBac CONTINUER should be added to the tank once a month.

#### Agro SanitoBac CONTINUER

#### Composition:

A mixture of live saprotrophic microorganisms at a concentration of more than 10 000 000 000 CFU/g.

#### Directions for use:

- · Mix the contents of the pack thoroughly in 10 l of water.
- · Leave for 10-12 hours.
- · Pour the prepared solution into the tank.
- $\cdot \;$  A packet of product is sufficient for a 100  $m^3$  tank.

**NOTE**: Agro SanitoBac CONTINUER should be used once a month as a maintenance treatment for Agro SanitoBac STARTER.



## BioGarden

## Microbial preparation to stimulate soil biological activity

- contains live microorganisms
- speeds up the decomposition of organic matter in the soil
- · reduces phosphorus deficiencies



#### Action of BioGarden:

- Ecological microbiological preparation for increasing the content of humus content in soil.
- Intended for use in the amateur cultivation of bushes, fruit trees and vegetables.
- It increases the humus content of the soil and increases the abundance of soil in absorbable phosphorus, necessary for the proper development of plants.
- · It can be used as a fertiliser for vegetables and fruit.

#### Composition:

The preparation contains a mixture of bacteria of the genus Bacillus selected from natural habitats, at a concentration of 1 000 000 000 CFU/ml, suspended in an organic carrier rich in amino acids.



- Preparation of application liquid: Dilute 10 ml of the preparation (one cap) in about 10 l of water and then water the area of about 10 m². In the case of fruit bushes and trees and strawberries, a double dose of the product is recommended.
- Carrots, parsley, beetroot, beans, peas: the product is recommended to be applied before or during sowing of the plants. Repeat the treatment once a month until mid-August. Dosage: 10 ml/10 m². Amount of water: 10 l/10 m².
- Cucumber, zucchinni, pumpkin, tomato: apply the product when sowing or planting out seedlings. Repeat the treatment once a week from flowering to the end of fruiting.
   Dosage: 10 ml/10 m². Amount of water: 10 l/10 m².
- Cabbage plants: apply from sowing or planting of seedlings until harvest. Repeat the application once a month.
   Dosage: 10 ml/10 m². Water amount: 10 l/10 m².
- Strawberry: apply a double dose of the preparation before the plants start flowering.
  - Dosage:  $20 \, \text{ml}/10 \, \text{m}^2$ . Amount of water:  $10 \, \text{l}/10 \, \text{m}^2$ .
- Bushes and fruit trees: apply a double dose of the product once a month from spring until the end of fruiting.
   Dosage: 20 ml/10 m². Amount of water: 10 l/10 m².





## **BioGarden Grass**

## Microbial growth stimulator for grasses

- stimulates the development of the root system of grasses
- eliminates the negative effects of drought stress
- strengthens plants before winter dormancy
- facilitates water and mineral uptake and mineral nutrients



#### Action of BioGarden Grass:

- · BioGarden Grass is a microbial growth stimulant for grasses.
- The bacteria strains used in BioGarden Grass of the genus Bacillus selected from European soils, stimulate the development of the root system of grasses, and by plant growth promoting activity, they reduce the negative impact of drought stress.
- The calcium phosphate solubilising bacteria present in the formulation make an additional pool of phosphate ions available to the grasses, which facilitates the development of the root system in spring and, in autumn, strengthens the root system before winter dormancy.
- Arbuscular mycorrhizal fungi of the genus Glomus stimulate the development of the grass root system and facilitate the uptake of water and minerals from the soil.

#### Composition:

Bacillus bacteria and arbuscular mycorrhizal fungi suspended in an organic carrier at a concentration of  $\geq$  1 000 000 000 cells per ml

- 11 of the product should be diluted in 150-2001 of water and sprayed over an area of 1000 m<sup>2</sup> followed by intensive lawn watering.
- Apply at least 2 times during the growing season: in spring (April/May) and in the second half of summer (August/September).
- · The preparation is intended for the fertilisation of lawns.
- · Shake vigorously before use!





## Biokomposter

## Microbial preparation accelerating the compost formation process

- significantly accelerates the formation of compost
- improves fertiliser properties
- sanitizes the compost from pathogenic bacteria
- eliminates unpleasant odours
- 100% natural and environmentally safe

#### Action of Biokomposter:

- Biokomposter is an ecological and efficient preparation for accelerating the composting process of organic waste of plant and animal origin.
- The product consists of carefully selected saprophytic bacteria that promote the decomposition of the composted material.
- Scraps of plant origin, such as leaves, branches, cut grass, weeds, as well as some kitchen waste, i.e. vegetable scraps, egg shells, coffee and tea grounds, are suitable for composting.
- With Biokomposter, shredded cellulose and lignin can also be composted.
- The Biokomposter contributes to faster compost formation, eliminates pathogenic microorganisms and parasite eggs
- Thanks to the microorganisms contained in the preparation, the finished fertiliser has a high nutrient content that is better absorbed by the plants.



#### Composition:

The preparation contains a mixture of viable microbial cells at a count of more than 10 000 000 CFU/g and an organic carrier.

- Sprinkle the top layer of composted material with the preparation and stir.
- If the compost is not moist, irrigate it with about 5 litres of water per 1 m³ of composted biomass.
- For best results, the pile should be topped with water weekly and the compost stirred every 2-4 weeks.
- After about 2-6 months (depending on the amount and type of composted material), a good quality fertile and hygienic fertiliser is obtained.
- Product in concentrated form, 200 g of Biokomposter is sufficient for up to 5 m<sup>3</sup> of composted matter.





## ChampiStym

## Microbial product for champignon cultivation

- promotes the healthy growth of mushroom fruiting bodies
- increases the number of fruiting bodies in the crop
- the formulation helps to reduce the use of chemicals



## Action of ChampiStym in mushroom cultivation:

- · Increases crop yields.
- · Increases crop harvesting time.
- · It also improves the quality of the harvest.
- · Mushrooms are less prone to mechanical damage.
- Significantly improves the viability and shelf life of the mushroom during harvesting and after harvesting under refrigerated conditions.

#### Composition:

Microorganisms of the genus *Bacillus* at a concentration  $\geq$  2 000 000 000 CFU/ml.

- 11 of preparation per 1000 m<sup>2</sup> of crop after dilution in 1000 litres of water.
- The mixture should be used immediately after preparation.
- It is recommended to apply the preparation on the 4th day after applying the cover.
- · Do not combine with chemicals.
- · The preparation does not require a period of withdrawal.
- Shake thoroughly before use!





## SanitoBac

Microbiological preparation for septic tanks, domestic wastewater treatment plants and sewers

- accelerates decomposition of contaminants
- improves the operation of the sewage system
- reduces deposit accumulation and reduces foaming
- extends the life of the tank



250 g ( 500 g ( 1 kg

#### Action of SanitoBac:

- The formulation significantly reduces sludge and foaming in the tank.
- · Bacteria in the formulation naturally break down contaminants present in household wastewater.
- · The high concentration of microorganisms contained in the product improves the decomposition of accumulated organic matter, such as fats, proteins, cellulose or starch.
- The powdery formulation does not clog sewer pipes and is quick in action.
- · The product extends the life of septic tanks and domestic wastewater treatment plants.

#### Composition:

A mixture of saprophytic bacteria and an organic carrier.

- Approx. 10 grams of the preparation should be put directly into the liquid waste tank or poured into the toilet bowl and then flushed.
- Apply once every two weeks.
- Do not use at the same time with strong detergents.





## **BioDrain Cleaner** KITCHEN, BATHROOM

#### **Ecological microbial preparations** to prevent blocking of pipes and drains

- eliminate odours
- for use in the home and catering
- safe for sanitary installations and the drainage system
- 100% natural and environmentally safe
- contain biodegradable organic carrier



#### BioDrain Cleaner Kitchen

#### Composition:

A mixture of selected microorganisms that break down fats, starch, cellulose and proteins.

#### Action of BioDrain Cleaner Kitchen:

- · Dissolves fat in pipes.
- · It breaks down proteins, starch, cellulose, plant and animal residues.
- · Removes residue build-up in the siphon.
- Ensures patency of the siphon and drain pipes in the sink.

#### BioDrain Cleaner Bathroom

#### Composition:

A mixture of selected bacteria specialising in the in the breakdown of proteins, fats and hair keratin.

#### Action of BioDrain Cleaner Bathroom:

- · Eliminates the problem of clogged pipes.
- · It breaks down hair, proteins and fats.
- · The powdery form guarantees rapid solubility.
- · The product easily reaches hard to reach places.

#### Directions for use:

· Pour 10 g of the biopreparation (kitchen spoon) directly into the drain and pour in about 0.5-1.0 litres of water.





#### The scope of services provided:

- Quantitative and qualitative microbial analysis.
- · Quantification and identification of microorganisms.
- Studies on the physiological and biochemical properties of microorganisms.
- · Optimisation of microbial cultivation.
- Evaluation of synergistic and antagonistic interactions between microorganisms.

#### Monitoring and protection of the environment:

- Studies on the abundance and composition of microorganisms from a variety of samples from natural (water, air, soil) and anthropogenic environments.
- Investigation of enzymatic activity and intensity of microbial metabolism in environmental samples.
- Biodegradation of materials and substances under different environmental conditions.

#### Examination of everyday objects and control of sterilisation:

- · Evaluation of sterilisation and sanitisation efficiency.
- Testing the elimination of pathogenic microorganisms from household appliances.

#### Soil testing in agricultural use:

 Determination of the abundance and diversity of microorganisms.

#### Research and development services:

- Assessing the possibility of using the microorganisms for the purposes indicated by the client.
- Development of bacterial preparations for the chemical (household chemistry) and biotechnology industries according to customer specifications.
- Determining optimum physicochemical growth and storage conditions for the indicated bacterial strains at laboratory and industrial scale, taking into account factors such as temperature, pH value, blending or aeration.
- Testing the survival of microorganisms during the production processes of fertiliser preparations (subjected to extreme physical and chemical factors).







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