

PROTECTPLUS

January 2025

Characteristics of the preparation

Protective effect against fungal and bacterial pathogens

Product type

Biofertilisation. Microbiological fertiliser product.

What plants can this preparation be used on?

Corn, cereals, onion, tomato, pepper, cabbage

What is PROTECTPLUS?

ProtectPlus is a microbiological preparation containing plant growth-promoting rhizobacteria (PGPR) of the Bacillus genus. During intensive plant cultivation, with the use of mineral fertilisation and chemical plant protection products, biodiversity is seriously depleted and the balance of soil microorganisms is disturbed. ProtectPlus is a microbiological preparation, a probiotic that restores the microbiological balance of the soil.

The preparation reduces the scale and frequency of fungal infections and allows you to reduce the use of pesticides - fungicides. The product is completely safe for humans and animals, approved for use in organic farming.

The task of preparation

Reducing biotic and abiotic stresses, maintaining homeostasis and microbiological balance of the soil, plant and production environment.

How to apply the preparation?

Dissolve 1 KG in 200-400 litres of water in a sprayer and apply to 1 ha of soil or plants. In the case of plants, the amount of water should be selected so that it is possible to cover all the plants. In the case of plants with a large leaf area, increase the amount of the preparation to 2-3 kg and the amount of water. In the form of a liquid introduced into the soil, introduced into the surroundings of the root ball and as a spray on the leaf surface. ProtectPlus can be used 2-3 times during the growing season at 2-3 weeks intervals. Can be used together with plant protection products and foliar fertilisers. The working fluid should be used within a few hours of preparation.

How does the preparation work?

The microorganisms contained in ProtectPlus isolated from undegraded soils stimulate the yield of plants and ensure their proper growth by supporting the decomposition of organic substances and making biogenic elements available to plants (mainly N and P), production of phytohormones and vitamins, - colonization of plant tissues and creation of a natural, non-pathogenic biofilm, which improves plant health and induces systemic resistance of amino acids and substances that reduce the negative impact of environmental stress, colonization plant tissues and the formation of a natural, non-pathogenic biofilm, which improves plant health and induces systemic immunity, hygienisation and restoration of the microbiological balance of the soil environment. They reduce the scale and frequency of fungal infections. The preparation allows you to reduce the use of pesticides - fungicides. The product is completely safe for humans and animals, approved for use in organic farming.

When to use the preparation?

The product should be used throughout the entire growing season, 7-14 days before the occurrence of fungal infections. The product can also be used at the end of the production cycle, after harvesting plants, to sanitize cultivation sites, especially under cover. The product can also be used to treat seed material.

Description of the process after using the preparation

The bacteria contained in the preparation protect the plant and the soil against excessive growth of fungi and enable the maintenance of microbiological balance.

Expected effect of application

Reducing the occurrence of fungal diseases.

When the expected effect will occur

The effect is observed within 2 weeks of use. The product may be of little help if the plants are heavily infected, so it should be used preventively, before the infection occurs.

Risks and contraindications of use of the preparation

Do not apply to the soil during long-term drought. It is not recommended to use just before fruit harvest (1-2 days before harvest).

Using the preparation with traditional fertilisers – recommendations

There are no contraindications to use with fertilisers and plant protection products, except those containing copper. Can be used in combination with fungicides, reducing their concentration by 50%.

Economics of use - impact on reducing production costs, e.g. lower amount of chemical fertilisers

It reduces the risk of crop loss, reduces plant infection by fungi, eliminates the risk of detecting fungicide residues in fruits and other plant parts, and allows limiting the amount of fungicides used.

Storage (storage conditions)

Store in a dry place at a temperature of -5 to +30 degrees Celsius (-23°F to 86°F), avoid direct sunlight, protect from unauthorized persons, especially children.

Expiration date of the preparation

2 years from the production date

Composition of the preparation

Contains *Bacillus subtilis* and *Bacillus amyloliquefaciens* bacteria in a total concentration of 2×10^9 per 1 gram of product. These microorganisms have a fungistatic effect, limit the development of pathogenic fungi and stimulate the systemic immunity of plants. Final concentration of soil bacteria of the *Bacillus* genus in ProtectPlus: not less than 2×10^9 cfu/ml.

Other relevant information

The product is completely safe for humans and animals, approved for use in organic farming.