



Biocomposite Destruct

A consortium of agriculturally valuable strains of several beneficial bacterial species in a culture liquid, with a total titre of at least 1×10^9 CFU/cm³

A microbiological degrader for accelerated decomposition of stubble remains after harvesting

Advantages:

- Provides quick decomposition of stubble and organic remains in soil
- Efficient both when applied before sowing (planting) and after harvesting crops
- Retains activity in case of drought
- It has a recurrent activity when favorable conditions for reproduction of bacteria, which will persist in the soil for a long time, occur
- Reduction of spread and development of diseases caused by soil phytopathogens
- It possesses growth-stimulating activity
- Improvement of nutrition regime in the root zone of plants

Action

The product is based on a consortium of valuable strains of three spore-forming bacteria:

Bacillus amyloliquefaciens (BIM V-842 D),

Bacillus mojavensis (VKPM V-13580),

Paenibacillus polymyxa RNCM B-747.

The total number of viable microbial cells is at least 1×10^9 CFU/mL

Mode of action

The product is based on spore-forming bacteria with high destructive, fungicidal, and growth-stimulating properties. Active degradation of plant residues is achieved through the synthesis of a complex of lytic enzymes such as cellulase, endo-1,4- β -glucanase, protease, amylase, and others by the producing strains.

In addition to its destructive properties, the product has antagonistic effects due to the synthesis of antibiotic substances and is capable of actively suppressing the growth of phytopathogenic microorganisms, while also stimulating plant growth and increasing yield.

Usage regulations

Crop	Consumption rate	Time and features of application
All crops	1-3 l/ha Working solution consumption rate: 200-300l/ha	Spraying of soil and shredded or non-shredded plant residues after harvesting previous crops or before sowing (planting). After the spraying, the time for starting work at the treated areas shall be set: one day for manual mechanised work.

Product application features

To prepare the working solution, fill the sprayer tank about two-thirds full with non-chlorinated water, start the mixing device, add the required amount of the fertiliser, bring to the estimated volume with water, mix the solution and perform the treatment. Spraying of soil with stubble remains of the previous crop shall be performed immediately before the soil treatment (plowing, cultivation, etc.). To stimulate the decomposition of stubble and plant residues, ammonium nitrate or urea (urea) can be added in amounts of 2-10 kg/ha of active ingredient. The minimum nitrogen rate is recommended for treating cereal straw, while the maximum rate is for treating sunflower post-harvest residues.

Agrochemical application method

The application technology of Biocomposite Destruct is in place and provides for the use of conventional and special technical means in agriculture intended for agrochemical works. For spraying of soil and stubble remains, it is recommended to use commercially available sprayers (OPM-2001, OPSh-2000, OPU 1/18-200, OMP-601, OP-2.0/18, OPG-2500-18-05F, OPG-2500-24-05F, SLV-2000 R, etc.) producing a coarse spray. Mix the fertiliser prior to use. To prepare the working solution, fill the sprayer tank about two-thirds full with non-chlorinated water, start the mixing device, add the required amount of the fertiliser, bring to the estimated volume with water, mix the solution and perform the treatment. It is recommended to use the fertiliser after opening the package and the prepared working solution on the day of work. Spraying of soil with stubble remains of the previous crop shall be performed immediately before the soil treatment (plowing, cultivation, etc.).

General information

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The preparation is based on spore-forming bacteria with good degradative and growth stimulating properties.

Total viable count: *Bacillus amyloliquefaciens* (BIM B-842 D), *Bacillus mojavensis* (VKPM B-13580), *Paenibacillus polymyxa* (VKM B-747) — not less than 1×10^9 CFU/cm³; foreign microflora — not more than 1×10^4 CFU/cm³, hydrogen ion activity (pH) — 7.0 ± 1.5 .

Storage conditions

Store in the consumer packaging in a dry and ventilated warehouse, separate from other materials, substances and food items, out of the reach of children and animals, at +4°C to +25°C. Keep away from direct sunlight.

Guaranteed shelf life

24 months from the date of production.

Safety

Hazard class 4, low-hazard substance. Producer strains of the preparation are non-pathogenic, not harmful to humans and animals and non-toxic, allergenic or toxigenic.

Registrant

Schelkovo Agrohimi, Russia

Manufacturer

Schelkovo Agrohimi, Russia