



TECHNOLOGY IS BASED ON ACCELERATED BIOCONVERSION BY «EKO-SP» ECOLOGICALLY PURE ORGANOMINERAL DEGRADATOR



«EKO-SP» ORGANOMINERAL DEGRADATOR IS

A COMPLEX MICROBIOLOGICAL PREPARATION WITH HIGH LEVEL OF HUMIC COMPOUNDS, MICRO/MACROELEMENTS, AMINO ACIDS, HAVING HIGH OXIDATION-REDUCTION REACTIONS AND MICROBIAL CONSORTIUM, WITH PRONOUNCED NITROGEN-FIXING PROPERTIES.



TO RESOLVE THE PROBLEM OF BIRD DROPPING
UTILIZATION MEANS AN ATTITUDE TOWARDS
THE LITTER AS A STRATEGIC RAW MATERIAL!

BENEFIT FROM THE USE OF «EKO-SP» ORGANOMINERAL DEGRADATOR

ECONOMICAL BENEFIT

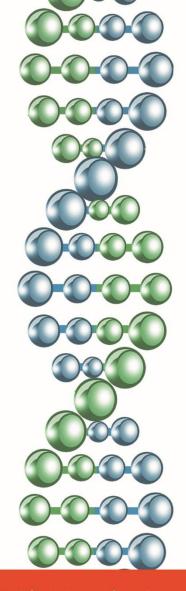
- Litter utilization is cheaper by 664 rub/ton according to the Decree of the Government of the Russian Federation No. 913 of 13.09.2016 "On payment rates for a negative impact on the environment".
- Possibility to plan and implement at once the litter mass with 3 persons involved
- 3 Saving of man-hours and equipment
- Cost savings for purchasing moister-absorbing materials (peat, straw, sawdust)
- Reduction of technological processes for mass utilization
- 6 No need for maintenance costs on the composting site
- 7 Prime product cost reduction
- 8 Production of commercially attractive and eco-pure fertilizer

ECOLOGICAL BENEFIT

- Conversion of organic mass into the 4th hazard class
- 2 Unpleasant odor removal in the territory
- 3 No need for storage spaces
- Reduced pollution and environmental emissions
- Sufficient increase of beneficial microflora in the organic litter mass and tenfold reduction of pathogenic microflora
- 6 Preservation of nitrogen and other nutritious elements

INNOVATIVE MICROBIOLOGY

- Removes unpleasant odor
- Reduces the cost of recycling
- 3 Preserves nutrients
- 4 Forms a new model of continuous litter recycling technology





Accelerated bioconversion is a transfer of fresh bird dropping from the 3d hazard class to THE 4th class at minimum labor, time and financial costs, while retaining the maximum possible beneficial properties of the mass as a raw material for the production of fertilizers.





COMPOSITION:

- Microorganisms and its metabolic products;
- Enzymes; Ferments; Peptides; Amino acids;
- Bacteria antagonists of pathogenic species of fungi and bacteria;
- Phosphorus and potassiummobilizing soil humic bacteria;
- Natural endophytic and soil nitrogenfixing bacteria;
- Humic acids;
- Macro- and microelements.



PACKING: 10 LITERS

- TR 20.14.33-001-19354396-2017
- Certificate of Conformity № ESTD1.B002.A0241
- ▶ Statement of the Federal Service for Veterinary and Phytosanitary Surveillance № ΦC-HB-2/247
- ► Environmental Compliance Certificate CEP (2603)-Γ-549/OC-51

ORGANOMINERAL DEGRADATOR APPLICATION RATE FOR DISINFECTION 1 TON / 10 LITERS

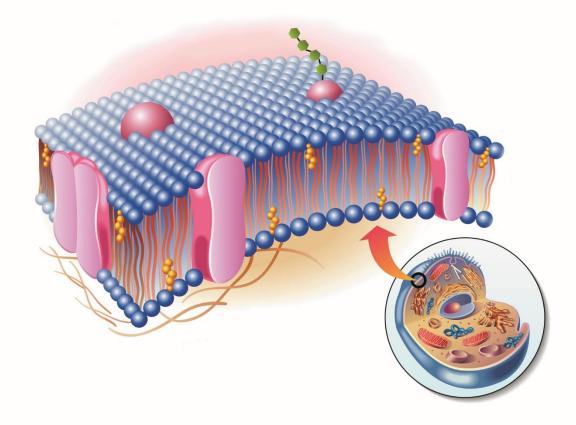


The PURPOSE is to provide poultry farms with a low-budget solution that gives the highest quality result in reducing the material and labor costs in litter utilization.

+ improving its quality as a raw material for recycling and producing fertilizers on its basis, as well as a reliable environmental protection.



BASIC PRINCIPLES OF ACCELERATED BIOCONVERSION



BIRD DROPPING

(a mixture of rapidly and slowly decomposing organic compounds)

<u>Mixed</u> with an organomineral degradator (with high redox potential)

<u>Forms</u> aerobic and anaerobic groups of microorganisms (with hydrolytic exoenzymes)

Starts a complex process of organic conversion

(due to the simultaneous flow of two multidirectional processes)

Mineralization process leading to the decomposition of organic substance to simple mineral compounds, up to carbon dioxide, nitrogen oxides and water.

Humification process leading to the cessation of organic substance decomposition at the stage of individual fragments formation, as well as to the synthesis of complex molecules from simple mineral compounds.

The technology of accelerated bioconversion using "EKO-SP" organomineral degradator is applied independently, and can also be successfully integrated into litter utilization technologies provided in the Information-technical reference book for best available technologies

"Intensive Poultry Breeding"



BENEFITS:

- 1 Significantly saves utilization time
- 2 Increases the nitrogen preservation index
- 3 Improves the overall ecological and economic effect
- 4 Eliminates the use of moisture-absorbing material (peat, straw, sawdust)
- Minor initial investments

Due to accelerated bioconversion, the humification process for organic substance prevails over the process of its mineralization, forming the compost with both good fertilizing properties and meliorating effect as well.

Therefore, such "72 hour compost" allows recovering properties and increasing the fertility of disturbed, degraded and polluted soils.



An organomineral degradator with increased reactivity effectively binds heavy metal ions, hydrocarbon molecules, synthetic surfactants, polyaromatic and polychlorinated compounds and residual amounts of pesticides, salts and other natural and synthetic ecotoxicants.

The organomineral degradator is harmless to humans, animals and environment. It does not contain genetically modified and pathogenic microorganisms.

ADVANTAGES OF ACCELERATED BIOCONVERSION:

MINOR INITIAL INVESTMENTS LOW CAPITAL COSTS LOW OPERATIONAL COSTS COMPLETE REMOVAL NITROGEN LOSSES REDUCED RELIABLE DISINFECTION OF UNPLEASANT ODOR TO THE MINIMUM IN 48 HOURS MAXIMUM PRESERVATION INCREASE CONTENT OF HIGH SPEED OF METABOLIC **OF NUTRITIOUS ELEMENTS HUMUS ELEMENTS IN RAW** REACTIONS IN RAW MATERIALS **MATERIALS** CONTROL OF THE STABLE HIGH ECONOMIC AND SOCIAL REDUCTION OF PRIME CHEMICAL ACTIVITY OF **EFFECT** PRODUCT COST **MICROORGANISMS**

SIMPLICITY OF APPLICATIONS, MINOR INITIAL INVESTMENTS

AND HIGH ECONOMIC AND SOCIAL EFFECT CONTRIBUTE TO THE EFFECTIVE

IMPLEMENTATION OF THIS TECHNOLOGY IN POULTRY FARMING.

METHODS OF USE

Manually using spray bottle

Using special equipment





ORGANOMINERAL DEGRADATOR APPLICATION RATE FOR DISINFECTION 1 TON / 10 LITERS

- If the litter humidity is less than 40%, add 10 liters of water in the tank (1:1) and prepare the working solution at the rate of 50% water + 50% degradator (1:1).
- Properly mix the solution.
- Pour the working solution into the tank and treat the biological waste according to manufacturer and supplier instructions.
- Evenly apply the working solution to the treated surface.
- If you have an automatic dispenser, use the instructions, guidelines and recommendations of the equipment supplier.

The technology of accelerated bioconversion with the use of "EKO-SP" organomineral degradator is a new way to improve the efficiency and implementation of production reserves for the poultry business.



