

# 有机肥料

**ORGANIC FERTILIZER** 

低地泥炭的稳定悬浮液

Stabilized suspension of lowland peat







# 新一代产品

# A PRODUCT OF A NEW GENERATION

高浓度复合物存在于低分子腐殖质中带有大, 中和微量元素中,它是通过流动超声技术提取低 洼泥炭和含泥炭成分所获得的。

A multimolecular complex of macro-, meso and microelements in a humic preparation obtained by the technology of flow ultrasonic extraction of peatand fluorinated components.

提高土壤质量

**INCREASE** in soil fertility

提高产品质量

**GROWTH** in product quality

降低生产成本

**REDUCTION** in production costs



# 有机肥料新标准

### A NEW STANDARD OF ORGANIC FERTILIZERS

它具有改良剂的作用,能够保持土壤肥力,并且长期使用可以使土地完全恢复其特性。这对于在贫瘠和退化土地以及处于危险农业区和异常自然条件下土地进行的农业活动来说非常有效.

Works as a meliorant - preserves soil fertility, and with prolonged use, restores its properties. The effectiveness of its application will be particularly appreciated by farmers cultivating depleted and degraded lands, as well as lands located in areas of risky agriculture and abnormal natural conditions.

它用于所有类型的农作物. 并且能够将盐碱地恢复到适合农业活动的状态.

It is used for all types of agricultural crops. Returns saline lands to the category suitablefor agriculture.





## 使用步骤

### STAGES OF THE PROCESS

- 可与其他肥料及化学植保产品配合使用。
- 保证产量从 20% 提高到 90%。
- 根据每种作物的特性,土壤耕作分几个阶段进行。
- Allowed use with other fertilizers and chemical plant protection products.
- Increased crop yield from 20 to 90%.
- Treatment is carried out in several stages, based on the characteristics of each crop.





# 提高产量(使用农业技术时)

**INCREASE IN CROP YIELD** 

(when using all agricultural techniques)





# 优点

### **ADVANTAGES**



### 生态

**ECO** 

- 100%天然有机原料,
- 让土壤充满养分,
- 对人类完全安全
- 100% natural organic raw materials,
- completely safe for humans,
- saturates the soil with nutrients.
- 完全恢复自然土壤肥力,
- 避免"除草坑"现象的发生,
- 由"活的"生物群对土壤进行生物活化。
- Full restoration of natural fertility,
- exclusion of the occurrence of a "herbicide pit",
- biological activation of the soil due to the "living" biota.

#### 保护

**PROTECTION** 

- 增强农作物的免疫系统,治疗干旱和疾病,
- 对土壤保湿。
- Strengthening the immune system of crops,
- reliable protection against drought and diseases,
- moisture retention in the soil.



#### 海关编码 3101000000

## 认证

#### **CERTIFICATION**



#### 注册号码 Registration number

ROSS RU.32001.04IBF1.OSP28.35342 TU 201580-001-90160664-2022

#### 测试报告 Test report

第 31640-PRG/23 号,日期:2023 年 6 月 23 日实施科学创新法自 2023 年 5 月 25 日起投入生产的活动: "所开发的产品技术具有多功能性, 使能够在最终产品的生产中针对特定类型的土壤选择成分...

## The act on the introduction of scientific and innovative activities into production dated 25.05.2023:

"The versatility of the developed technology for obtaining product allows you to select composition in production of final product for specific types of soils".





# 自然灾害后的恢复

# RESTORATION AFTER NATURAL DISASTERS

用腐殖酸产品处理热解后的土壤, 对土壤根层微生物群落和植物具有胁迫保护作用, 这对肥力非常重要。

Treatment of post-pyrogenic soils with a product based on humic acids performs a stress-protective role for the microbial community of the root layer of the soil and for plants, which has a great importance for the restoration of soil fertility.

**RECLAMATION OF CLOSED** 

**LANDFILLS AND DUMPS** 

生物泥炭肥料(Biotorf)作为改良剂, 对受重金属和放射性核素污染 的土壤有效。



"Biotorf", as a meliorant, is effective on soils contaminated with heavy metals and radionuclides.



# 自然灾害后的恢复

# RESTORATION AFTER NATURAL DISASTERS

- 减少水土流失,
- 恢复枯竭的土地
- 确保腐殖质的恢复
- 提高土壤和水分保持率,
- 增加气体渗透性,
- 在包括沙地在内的贫瘠土地上形成肥沃的土壤。
- Reduces soil erosion,
- restores depleted lands,
- ensures the restoration of humus,
- improves soil structure and moisture retention,
- increases gas permeability,
- creates a fertile layer on infertile lands, including sand.







### COMPOSITION



在生长期对植物进行处理是有效的,因为产品中存在大量低分子运输化合物,可确保将营养物质定量输送到生长的细胞。

Plant treatment during the vegetative stages has an effect due to the presence of a large number of low molecular weight transport compounds in the preparation, which provide controlled transport of nutrients to growing cells.

有机来源的生长刺激剂有助于激活生长过程,提高光合作用反应和细胞内转化的效率。

Organic growth stimulators promote activation of growth processes, increase the efficiency of photosynthetic reactions and intracellular transformations.

独创的超声波处理低洼泥炭专利技术。

Author's patented technology of ultrasound treatment of lowland peat.



# 成分

### **COMPOSITION**

**60** 克/升 g/l

黄腐酸

Fulvic acids

40-45%

腐植酸

Humic acids





# 在乌兹别克斯坦进行的研究

### **CONDUCTING RESEARCH IN UZBEKISTAN**

锡尔河地区。 棉花播种日期:2023年4月1日、5月10日

Syrdarya region Cotton. Sowing dates: April 1, May 10, 2023

结论:

在低地泥炭的条件下, 种子4-5天即可发芽, 发芽率100%. 不使用低地泥炭则第 15-18 天, 并且一些种子无法发芽. 株高差异: 不使用低地泥炭, 株高差异在10厘米 使用低地泥炭, 株高没有差异.

**Conclusion:** with lowland peat, seeds germinated on the 4th-5th day with 100% germination. Without lowland peat, seeds germinated on the 15th-18th day, some seeds did not germinate. Difference in plant height: without lowland peat - 10 cm, with lowland peat - no difference.





# 在乌兹别克斯坦进行的研究

### **CONDUCTING RESEARCH IN UZBEKISTAN**

纳沃伊地区。 棉花播种日期: 2023 年 5 月 12 日

结论:使用低地泥炭地区,第4天种子均匀发芽,

无间隙;未使用地区,

第四天种子刚刚开始胀大.

Navoi region. Cotton sowing dates: May 12, 2023

**Conclusion:** with lowland peat, seeds germinated uniformly on the 4th day without any gaps. In the untreated plot, seeds just started to swell.





## 我们的伙伴 OUR PARTNERS



### 俄联邦国家预算高等教育机构 "萨拉托夫国立瓦维洛夫遗传学、 生物技术和工程大学"

Federal State Budgetary Educational Institution of Higher Education "Saratov State University of Genetics, Biotechnology and Engineering named after N.I.Vavilov"



农业先进技术的开发和实施, 获得对环境安全的农作物产品, 原材料、添加剂和材料的综合研究, 开发基于生物技术的环保技术, 环境管理体系的发展



- development and implementation of advanced technologies in agriculture,
- production of environmentally safe crop production,
- comprehensive research of raw materials, additives, materials,
- development of environmentally friendly technologies based on biotechnology,
- development of environmental management systems.



## 我们的伙伴 OUR PARTNERS



# 联邦国家预算科学研究机构 "东南联邦农业科学中心"

Federal State Budgetary Scientific Institution "Federal Agrarian Scientific Center of the Southeast"

### 优先的科学发展方向:

农作物抗旱、耐热、抗冻的生理、遗传学和生物化学研究, 发展适应性景观农业、 合理作物轮作和土壤保护综合体方案的科学基础, 论证和开发稳定和合理利用土壤肥力的系统, 改进低成本、节水、环保的农作物栽培技术。

- research on the physiology, genetics and biochemistry of drought, heat and frost resistance of crops,
- development of scientific foundations of adaptive landscape farming, rational crop rotations and schemes of soil protection complexes,
- justification and development of systems for stabilization and rational use of soil fertility,
- improvement of low-cost, moisture-saving and environmentally safe technologies for cultivation of field crops and plant protection systems.





# 使用建议

### **RECOMMENDATIONS USING**

可与尿素氨混合物及其他矿物肥料和有机肥料一起使用。这种情况下,这些肥料的施用量可比平时减少20-30%。同时也可配合化学植保产品。

**Allowed use** with NPK and other mineral and organic fertilizers. In this case, the amount of these fertilizers can be reduced by 20-30% of the usual amount. And also with chemical plant protection products. Pre-sowing soil treatment: no later than 2 weeks before sowing.

播种前与拌种剂 一起对种子进行处理。 使用量: 每1吨种子用药 500毫升。

#### **Seed treatment**

before planting together with a seed dressing agent. Working solution: 500 ml of the product per 1 ton of seeds. 播前土壤处理: 不迟于播种前2周。用量: 每1公顷6升。污染区域: 每1公顷6至60升。

**Consumption:** 6 liters per 1 hectare. Contaminated areas: from 6 to 60 liters per 1 hectare.

#### 生长季节处理:

- 1 幼苗 生长出 2-3 片叶子;
- 2-抽茎-孕蕾;
- 3-开始开花。

#### Treatment during the vegetation period:

- 1 emergence formation of 2-3 true leaves;
- 2 stem formation budding;
- 3 beginning of flowering.
- + 喷涂(维护):
- 白天高温(早上/晚上);
- 夜间温度较低(不低于 +8°C)。 用量:每1公顷用药200-300毫升。 至少用 100 升水稀释。

#### + Spraying (maintenance):

- at high daytime t (morning/evening);
- at low nighttime t (not below +8°C). Working solution: 200-300 ml of the product per 1 hectare. In a dilution of not less than 100 liters of water.

Recommendations for use for each crop are provided upon request.



# 前景

### **POSSIBILITIES**

### 科学支持

提供关于使用生物泥炭(Biotorf)产品的专家支持, 提供关于种植技术的现场咨询, 为农场制定单独的应用方案, 专家实地进行分析的可能性, 引进新的土壤处理系统,同时减少化学负荷, 开发自然灾害和污染后土地恢复技术.

#### **SCIENTIFIC SUPPORT**

- Expert support on the use of the product "Biotorf",
- field consultations of specialists on cultivation technologies,
- development of individual application schemes for farms,
- possibility of attracting external experts and conducting analyses,
- introduction of new tillage systems while reducing the chemical load,
- development of technologies for land restoration after natural disasters and pollution.





# 为什么选择我们

### WHY CHOOSE US?

#### 价格政策

有机肥中价格最低。用于在农场进行实验,产品按成本出售。

#### **PRICE POLICY**

The lowest prices among organic fertilizers. The products are sold at costprice for conducting experiments in farms.



#### 新技术

颗粒尺寸使其能够避免堵塞农业浇水设备 (包括无人机) 的喷嘴。 滴灌系统的理想选择。

#### **NEW TECHNOLOGIES**

The particle makes possible not to clog the nozzles of irrigation agricultural machinery, including drones. Perfect for drip irrigation systems.

#### 高分子化合物

增加的黄腐酸和腐植酸浓度是腐植酸盐的 2 倍。中性pH值。恢复土壤微生物区系的"活"的生物群。灌溉用水量得到减少。

#### **HIGH MOLECULAR WEIGHT COMPOUNDS**

The increased concentration of fulvic and humic acids is 2 times more than in humates. Neutral pH. "Living" biota that restores the microflora of the soil. Allows to reduce the water consumption for irrigation.

#### 便捷的物流

#### **CONVENIENT LOGISTICS**

Delivery by any means of transport. The close location of the railway transporthub and the federal highway.



# 专家的意见

### **OPINIONS OF EXPERTS**





生物泥炭肥料(Biotorf)是一种完全有机的产品,是未来生产不含任何农药残留食品的方向".

"Biotorf is a completely organic product and one of those preparations thatin the future will allow the production of food products that do not contain pesticide residues".

扎乌尔·哈普采夫 - 微生物学和生物技术教研室副教授" 联邦国家预算高等教育机构"萨拉托夫国立生物技术、 遗传学和工程大学" Zaur Haptsev - Associate Professor at the Department of "Microbiology and Biotechnology", "Saratov State University of Genetics, Biotechnology and Engineering named after N.I. Vavilov"



"生物泥炭的日益普及不仅是由于化肥和农药价格的上涨,更是由于环保观念的日益普及。 这些因素无疑为在可预见的未来使用生物泥炭带来了新的机会。"

"The growing popularity of Biotorf is due not only to the rise in the cost of chemical fertilizers and pesticides, but also to the growing popularity of environmentally friendly products. These factors certainly open up new opportunities for the useof Biotorph in the foreseeable future".

瓦列里•沙马诺夫 - 萨拉托夫地区蔬菜种植者协调委员会主任、 "农业保护"有限责任公司经理 Valery Shamanov - Director of the Coordinating Council of Vegetable Growers of the Saratov region, Director of LLC "Agrozashita"



# 联系方式

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