





Accelerating Innovation and Entrepreneurial **Excellence in Higher Education Institutes**

Complex biological fertilizer with using marine biological resources for intensive agricultural technology Algae Field®

Odesa I.I.Mechnikov National University

Seville | 2023

PARTNERS























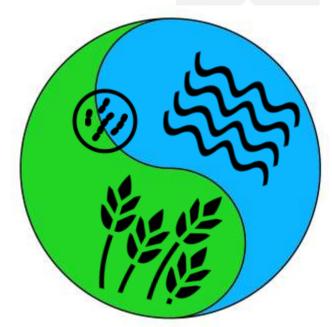






Granulated organic fertilizer for increasing the profitability of field crops Algae Field®

- 100% natural, organic fertilizer
- Contains live, useful microorganisms
- The main ingredient is Black Sea algae
- Protects the plant from diseases
- Suitable for all types of soil
- Retains moisture in the soil
- 1 ton of Algae Field® = 5 tons of organic compost

























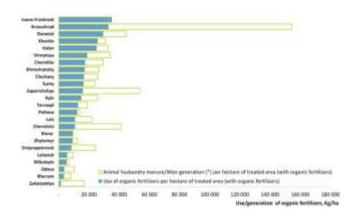


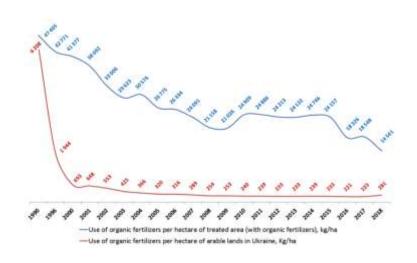




Potential market volume of Ukraine – 480 millions \$

- In 2022, were applied organic fertilizers to 12 million hectares
- At the rate of Algae Field® 100 kg/ha, the need is 1.2 million tons
- Cost of 1 ton of Algae Field® \$400 = \$480 millions for 12 million/ha
- Costs per 1 ha = \$40





























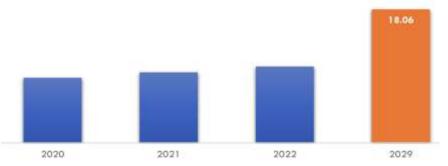


The potential volume of the European market – 772 millions \$

- In 2022, organic fertilizers were applied to 19.3 million hectares
- At the rate of Algae Field® 100 kg/ha, the need is 1.93 million tons
- Cost of 1 ton of Algae Field® \$400 = \$772 million for 19.3 million/ha
- The forecasted average annual growth rate of the organic fertilizer market is 7.7% during 2021-2026



Europe Biological Organic Fertilizers Market: Area Under Organic Cultivation in Hectares, Europe, 2016-2026

















Source: FIBL

















Main competitors

Europe

- **Ficosterra**
- **ASB** Greenworld
- Symborg SL
- Rizobacter Argentina S.A, Lallemand Inc.
- **National Fertilizers** Limited

Ukraine

- **BTU Centr Ukraine**
- Enzim biotech









*Disclaimer: Major Players sorted in no particular order



























Analysis of competitors

STRENGTHS

- A well-known brand on the market
- Availability of own production
- The presence of a client base
- A wide range of products
- High level of capitalization of companies
- Strong marketing

WEAKNESSES

- High product prices
- Outdated range of products
- High prices for raw materials
- Dependence on imported raw materials
- Sophisticated production technology
- A large amount of waste



























The main benefits of using technology Algae Field®

- Costs Algae Field® on 1 ha from 40 \$
- Guaranteed yield increase from 7%
- Increases the humus level in the soil by 0.01-0.1% per year
- Allows to reduce the amount of chemical fungicides by 15%
- Algae Field® reduces your carbon footprint and allows you to generate credits through the Carbon **Market Credits program**





























SWOT

STRENGTHS

- A strong team of scientists and practitioners
- New, unique product
- The latest production technology
- Low cost
- An unlimited, cheap source of raw materials
- Universality of application

OPPORTUNITIES

- Possibility to produce fertilizer using alternative sources of electricity
- The possibility of creating waste-free production
- Ability to transfer production to any maritime country

WEAKNESSES

- Poor marketing campaign
- Shortage of qualified staff in Ukraine
- Insufficient level of funding
- Absence of government support

THREATS

- The war in Ukraine, the blockade of the Black Sea. Possible interruptions in the supply of raw materials
- Competition
- Problems from the state bodies of Ukraine



























Need to invest

- Equipment Purchase of a cold granulation line \sim \$350,000
- Marketing costs (laying down demo ranges, participation in agricultural exhibitions in Europe and Ukraine) ~ \$100,000

































Algae Field®:



Use Micro and Marine Life for Plant Life



Video Algae field.mov



























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