PAROSTOK

Solving the **global food crisis** through innovation in seed processing.

PROBLEM: THE GLOBAL FOOD CRISIS

Today, over 820 million people -- every 11th person -- struggle with hunger
By 2030, climate change threatens to reduce corn yields by up to 24% (NASA)

HOW WILL WE FEED THE FUTURE?

MEET PAROSTOK: REVOLUTIONIZING AGRICULTURE

PAROSTOK TRANSFORMS AGRICULTURE WITH INNOVATIVE SEED TREATMENTS

Enhances resistance to drought and frost.

Speeds up crop readiness by up to **12 days**.

Boosts yields by up to **175%**.

Provides non-chemical pest control.

SOLUTION: TURNING CHALLENGES INTO OPPORTUNITIES

PAROSTOK EMPOWERS FARMERS WITH:

Resilient, climate-adapted crops

Efficient water and fertilizer usage

A path to sustainable food security for all

HOW?

Parostok stimulates the seed kernel with precise microwave irradiation, increasing the germination energy and **root growth by 2-4 times.**

Lab results from AgroEkoton Poland on 1-week sprouts

Non-treated **Treated on different modes**

PROVEN RESULTS IN 2024

FROM AGROEKOTON ASSOCIATION IN POLAND

Wet grain yield: 11.1 -> 12.8 T/ha (+15.3%)

Dry grain yield: 10.3 -> 12.0 T/ha (+16.5%)

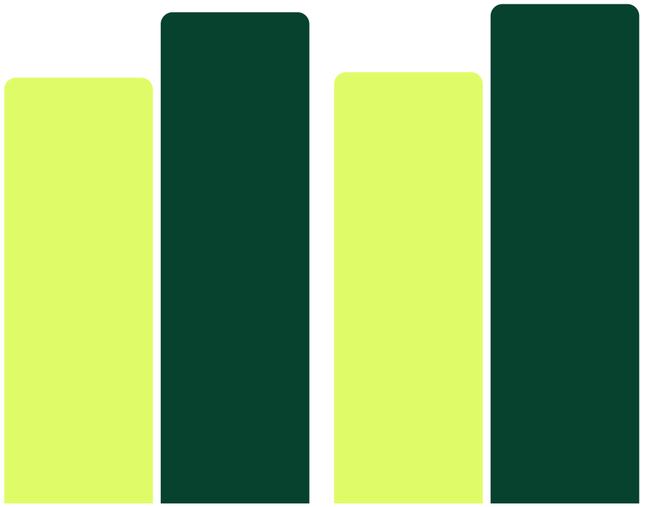
Sale of wet grain: 1560€ -> 1800€ (+15.4%)

Sale of dry grain: 1580€ -> 1830€ (+15.8%)

Total Profit Increase Per Hectare: +250€ (+15.8%)

***Corn variety Nataelo from KWS**

+16%



OUR TARGET AUDIENCE

Seed Producers:

Companies that produce high-quality planting materials.

Agroholdings:

Organizations that cultivate and use their own crop varieties.

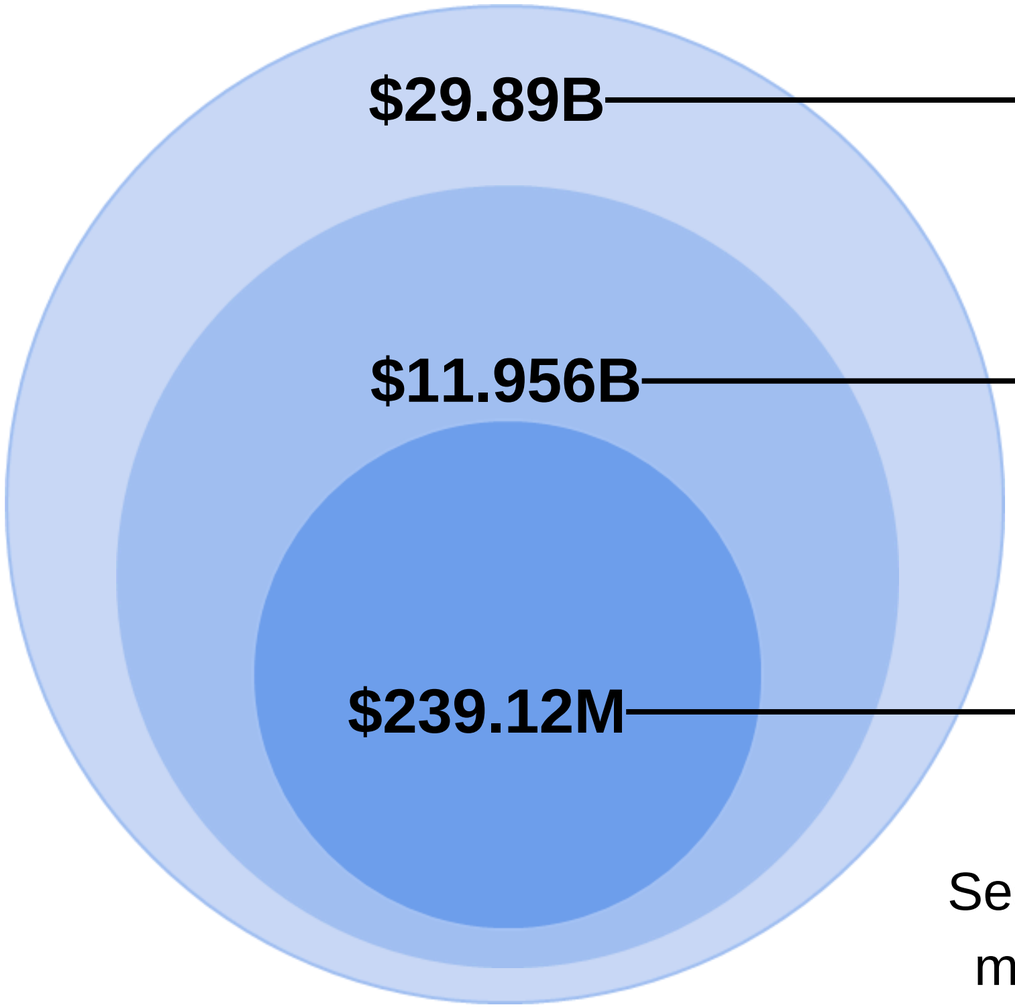
Elevators:

Facilities responsible for handling and storing harvested crops.

Fumigation Services:

Businesses specializing in treating harvests before storage to ensure quality preservation.

TAM SAM SOM by 2030



$29.89B → TAM Total Available Markets:

$11.956B → SAM 40% Serviceable Available Market

$239.12M → SOM 2% Serviceable Obtainable Market

Seed treatment market $24.5B by 2030. Agricultural fumigants market $3.74B by 2030, Seed processing equipment market $1.65B by 2030

COMPETITORS

Feature	Parostok (MW)	Monsanto (Bayer)	Syngenta
Non-chemical processing	+	–	–
Eco-friendliness	+	–	–
High crop yield (up to 175%)	+	–	–
Resistance to pests	+	+	+
Applicability to all seeds	+	±	±
Effectiveness in harsh conditions	+	±	±

***Our technology is suitable for varieties and hybrids previously treated with chemicals and complements competitors technologies.**

MARKET READINESS

- Stage of readiness: **TRL8: Pre-serial manufacturing**
- EU Test restuls
- IP Protection
- UA & EU markets expansion

TRACTION

*** Our technology is recommended as a methodology for implementation by the Ministry of Agrarian Policy of Ukraine, document signed by the Deputy Minister 13.10.09 No. 37-15-3.12/18658**

*58,000 STUDIES AND TEST IMPLEMENTATIONS. 58 CROPS AND 128 HYBRIDS WERE STUDIED.

Test implementations will begin in 1-2Q 2025, in MHP Ukraine and Bayer Germany

TRACTION 2024

The best technological solution in the Agrotech and Food Security category

Sikorsky Challenge

web summit LISBON NOVEMBER 11-14,2024

STOWARZYSZENIE AGROEKOTON

Test implementations completed

INVESTMENTS ROUND

WE NEED BUDGET TO COVER PCT APPLICATION & CERTIFICATION IN EU.

Q1 2025 → **Q2 2025** → **Q3 2025** → **Q4 2025** ⇢

Patent & certification process in UA + EU, patent application (PCT).

Partnering with new farmers for more feedback and proven results.

Launching active marketing campaigns in UA & EU for entering markets

PRICING

$100 per ton - For end users.
Processing own material only

$80 per ton - For Agroholdings, Service providers.
For commercial processing of seeds material

2 years warranty, staff training included

***Price depends on the region**

***Old design model.**
New design under development

OUR BUSINESS MODEL

1. **B2B Service Model** - Offer pre-sowing seed treatment as a service to seed producers, agroholdings, farmers.

2. **Pay-Per-Use Model** - Offer flexible, pay-per-use pricing for clients (e.g., elevators or fumigation services, small farmers).

3. **Strategic Partnerships with Industry Players** - Collaborate with existing seed producers, elevators, or agritech firms to integrate our solution into their supply chain.

Our Business model

SMALL

Farmers from 1 to 10 tons

$100 per ton of processed seed

MEDIUM

Farmers from 10 to 100 tons

$90 per ton of processed seed

ENTERPRISE

Farmers from 100 to 1000+ tons

Licensing
Price negotiable

SEED PRODUCERS, ELEVATORS

Licensing
Price negotiable

VALUE IN NUMBERS + ROI

SILESIAN GROUP OPPORTUNITY - EXAMPLE OF CALCULATIONS

Land Area: 3,500 hectares (corn monoproducer)
Sale of wet grain: 1560€ -> 1860€ (+18.%)
Sale of dry grain: 1580€ -> 1880€ (+18.4%)
Total Profit Increase Per Hectare: +300€ (+18.4%)

(+18.4%)

Financial Impact
Additional Gross Profit per Hectare: +~€300
Total Additional Gross Profit (Yearly): €~1 050 000

Payback & ROI
Cost of processing:€11900
Processing costs €3.4 per hectare
Payback Period: after the yield readiness
ROI (Year 1): 8723.5%

OUR TEAM

OUR MISSION: TO END HUNGER AROUND THE WORLD BY 2045

Leonid Burdyka
CEO
30+ years in Electrical Engineering & Business

Valery Prokhorov, PhD
CTO
50+ years in Agriculture & Biology scientific research

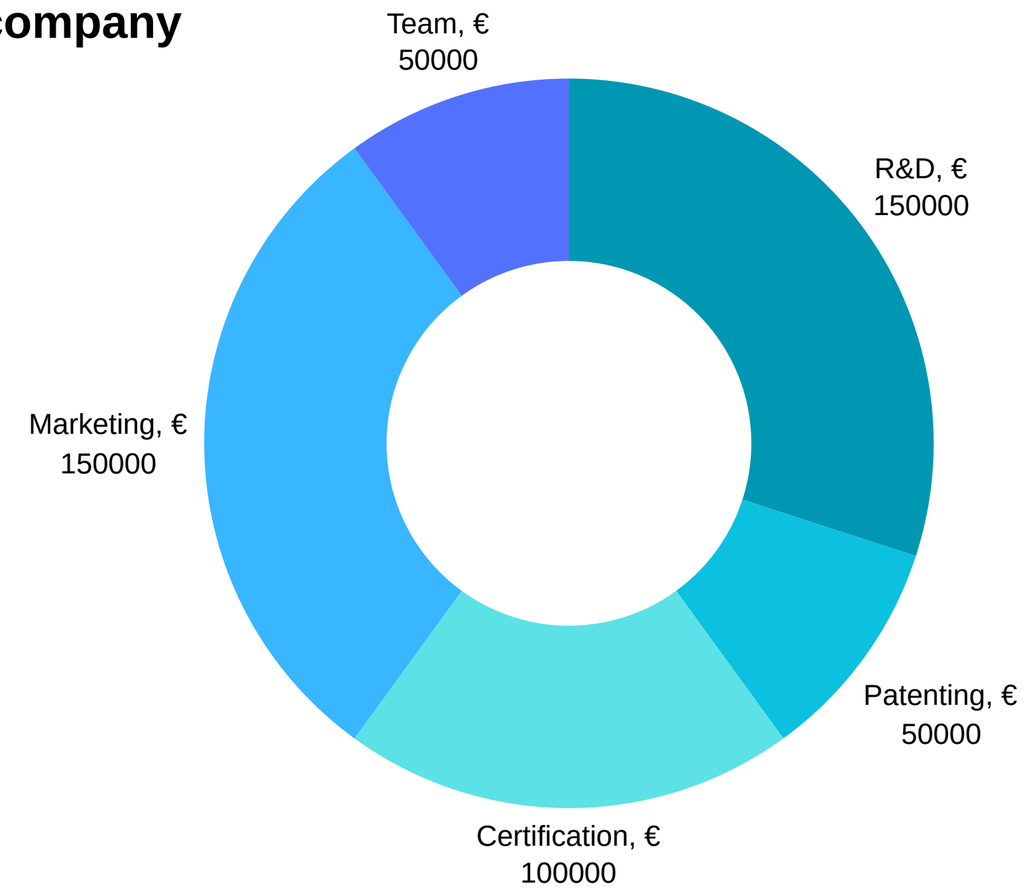
Evgeniy Vasyliev
CBDO (BizDev)
15 years in marketing & sales

Valeriia Burdyka
CCO (Chief Communications Officer)
7 years leading projects, building network

BUDGET

Requested amount of investment for 10% of shares in the company

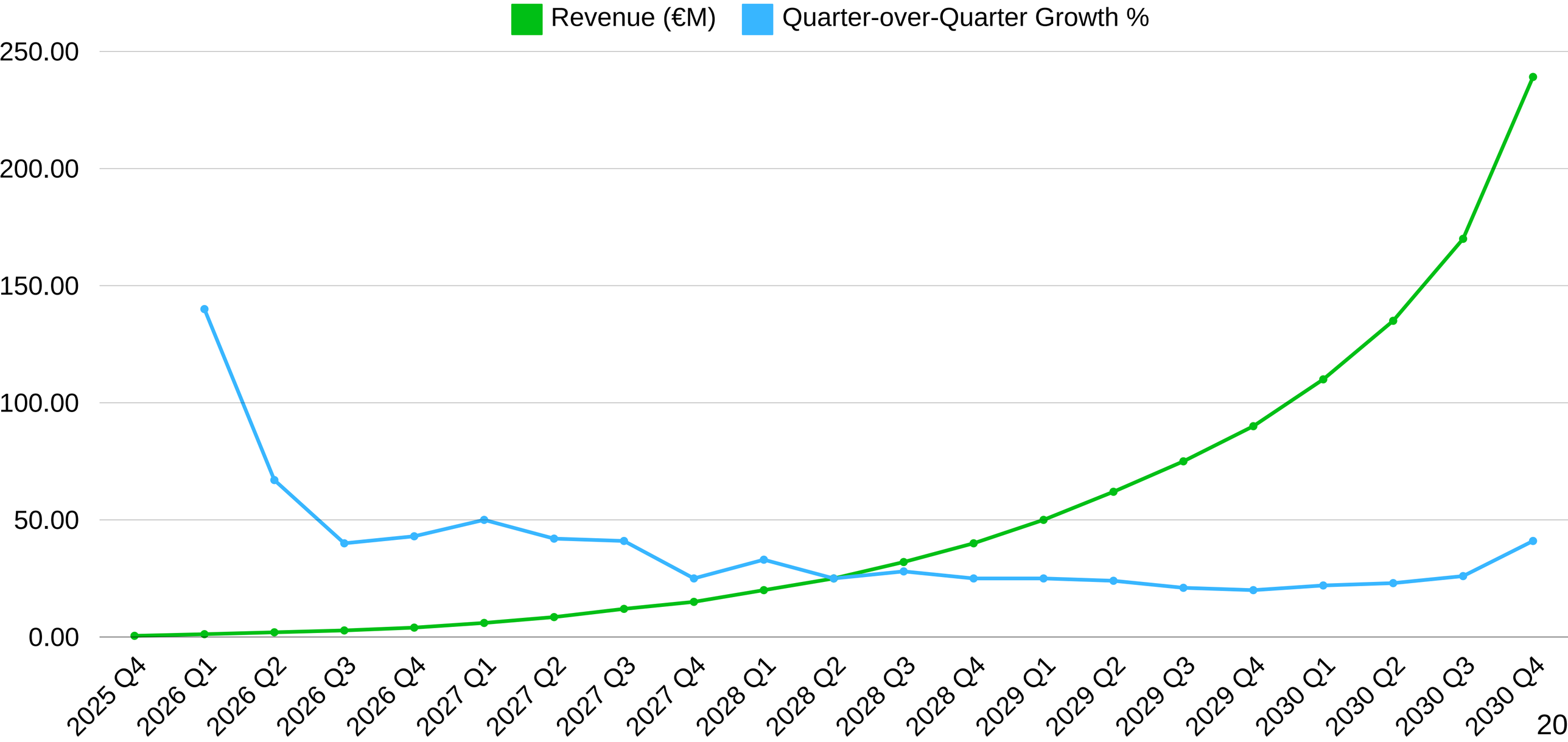
- R&D - €150000
- Patenting in EU, US, UA - €50000
- Certification EU, US, UA - €100000
- Marketing - €150000
- Team - €50000



TOTAL: €500 000 (in tranches, in stages)

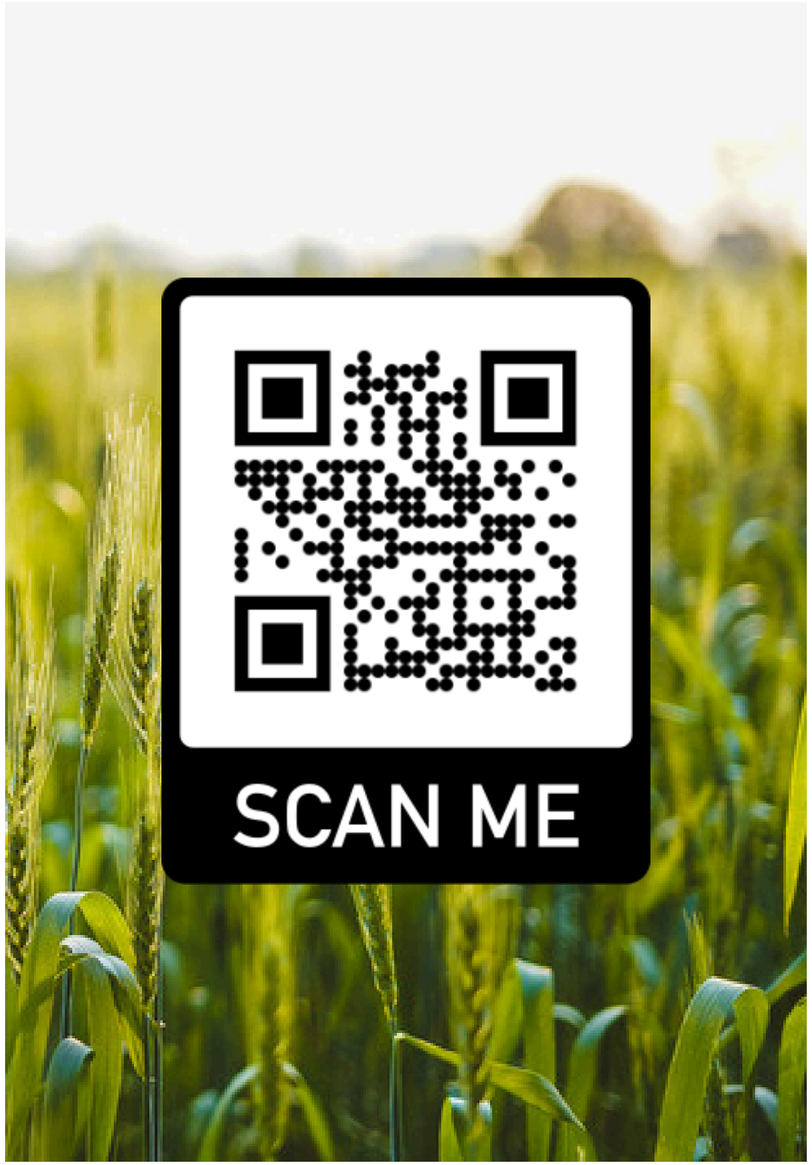
***The company's market share by 2030 is expected to be at $239.12 miilion, meaning the investor's ROI will be $23,9 million, ROI 4680%, Annualized ROI, 116.71%.**

Revenue forecast by 2030



CONTACT US

- To connect and get the **full technical description**
- If you are an **investor** - we are open for a collaboration and discussion of our business plan
- If you belong to the agriculture industry and are interested in effective and chemical-free **solutions** which **bring real profit**
- If you are interested in our mission and want to stay posted

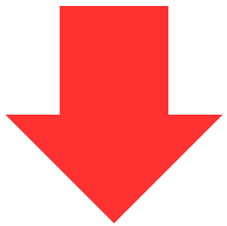


mwparostok@gmail.com

www.parostokmw.com

THANK YOU!

F.A.Q



TOTAL MARKET SIZE

1. According to Brainy Insights, the **Seed treatment market** was valued at **$10.33B** in **2023**, with significant growth potential projected to reach **$24.5B by 2030**.

2. The global agricultural fumigants market was valued at **$2.27B** in 2021, with significant growth potential projected to reach **$3.74B** by 2030.

3. Seed processing equipment market, which is expected to reach **$1.65B** by **2030**

WHAT CAN WE PROCESS?

YOU NAME IT.

Increase in yield up to:

- Wheat +27%
- Hemp +18%
- Corn +25%
- Barley +23%
- Peas +53%
- Soybeans +26%
- Lucerne +11%
- Sunflower +65%
- Rapeseed +18%
- Buckwheat +41%
- Carrot +45%
- Beet +34%
- Courgette +175%
- Pumpkin +48%
- Melon +167%
- Watermelon +50%
- Cucumber +45%
- Tomatoes +43%
- Bell pepper +27%
- Eggplant +45%
- Rice +10%
- Onion +40%
- Parsley +22%
- and more....

FIRST FOLLOWERS

“**Over 5 years** of widespread use of innovative technology, fluctuated over the years within **15-27%**, amounted to more than **11 thousand tons** and plus more than **50000$** due to the abandonment of pesticides.”

V.V PANKEEV. APSF “ALEX” Zaporizhia region, Ukraine

Agricultural culture	Variety	Hectare control	Hectare procesed	Control of 100kg/hectare	100kg/hectares harvested	Increase in yield 100kg/hectare
Winter Wheat	“Victoria”	10	700	43,4	60,1	**38,5% / 16,7**
	"Union”	10	600	41,4	56,8	**32,8% / 14.5**
Barley	“Foundation”	5	80	27	40	**41.8% / 13**
Sunflower		5	1250	12	19,8	**65% / 7.8**

Increasing the yield of seed grain of winter wheat varieties “Soyuz”, “Victoria” and others over 5 years of widespread use of innovative technologies, it fluctuated from year to year in the range of 15-27%. APSF ALEX

the culture grade	area, hectare		Harvest center per hectare		Increase in yield	
	Control, seeds without processing	Treatment	Control, seeds without processing	Treatment	center per hectare	%
Winter wheat Victoria	10	70	43,4	60,1	16,7	27,8
Winter wheat Union	10	600	44,1	58,6	14,5	24,7
Winter barley Base	5	80	27,0	40,0	13,0	32,5
Spring barley Vakula	3	10	30,5	38,0	7,5	19,7
Peas Damir	10	27,5	19,0	25,0	6,0	24,0
Peas Kharkov standard	10	106	18,6	24,0	5,4	22,5
Mustard	10	100	8,4	16,6	8,2	49,3
Winter rape	10	185	28,0	37,0	9,0	24,3
Sunflower	5	1250	12	19,8	7,8	65,0
Soy	10	162	24,0	31,0	7,0	29,2

Additional harvest from the sown areas for 2 years amounted to

7541,6 т.

Zaporozhye region
APSF "Alex"

УКРАЇНСЬКА АКАДЕМІЯ АГРАРНИХ НАУК

ІНСТИТУТ РИСУ.

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26.12.05 № 230
На № _____ від _____

Затверджую
Директор _____ А.А.Ванцовський

Акт впровадження

Інститутом рису Української академії аграрних наук спільно з Південною філією відділення промислової радіоелектроніки Міжнародної академії інформатизації в 2005 році проводились дослідження по впливу мікрохвильової стимуляції насіння рису на продуктивність рослин і якість зерна.

Польовий дослід було закладено з двома сортами рису Україна-96 та Антей і режимами обробки насіння мікрохвильовим полем: 110 та 130 секунд відповідно. В якості контроля використовували необроблене насіння рису. Перед посівом насіння фунгіцидами не оброблялось.

Виявлено, що мікрохвильове поле підвищує польову схожість насіння рису: у сорта Україна-96 на 8%, Антей на 5%. В зв'язку з низькою польовою схожестю насіння рису взагалі (Україна –96 - 28,0%, Антей - 29,1% на контролі), це підвищення є достатньо суттєвим.

Урожайність у обробленого насіння склала: 95,1ц/га у сорта Україна-96 та 78,5 ц/га у сорта Антей (збільшення врожаю відносно контролю - 10,2 ц/га та 7,1 ц/га відповідно).

Засміченість зерна з обробленого насіння при очищенні на 3-5% нижча ніж на контролі за рахунок меншої кількості пустого та щуплого зерна, це вказує на те, що обробка мікрохвильовим полем підвищує виповненість зерна рису. Також підвищилась скловидність зерна рису на 6-8% та зменшилась тріщинуватість на 2-4%, що підвищує загальний вихід крупи на 0,5 % та вихід цілого ядра на 2%.

Виходячи з вищевикладеного, вплив мікрохвильової технології на продуктивність і якість зерна рису є перспективним напрямком досліджень та потребує подальшого вивчення.

Заступник директора з наукової роботи, к.с.-г.н. Р.А.Вожегова
Зав. лабораторією а/х аналізів А.М.Марущак

UKRAINIAN ACADEMY OF AGRICULTURAL SCIENCES INSTITUTE OF RICE.

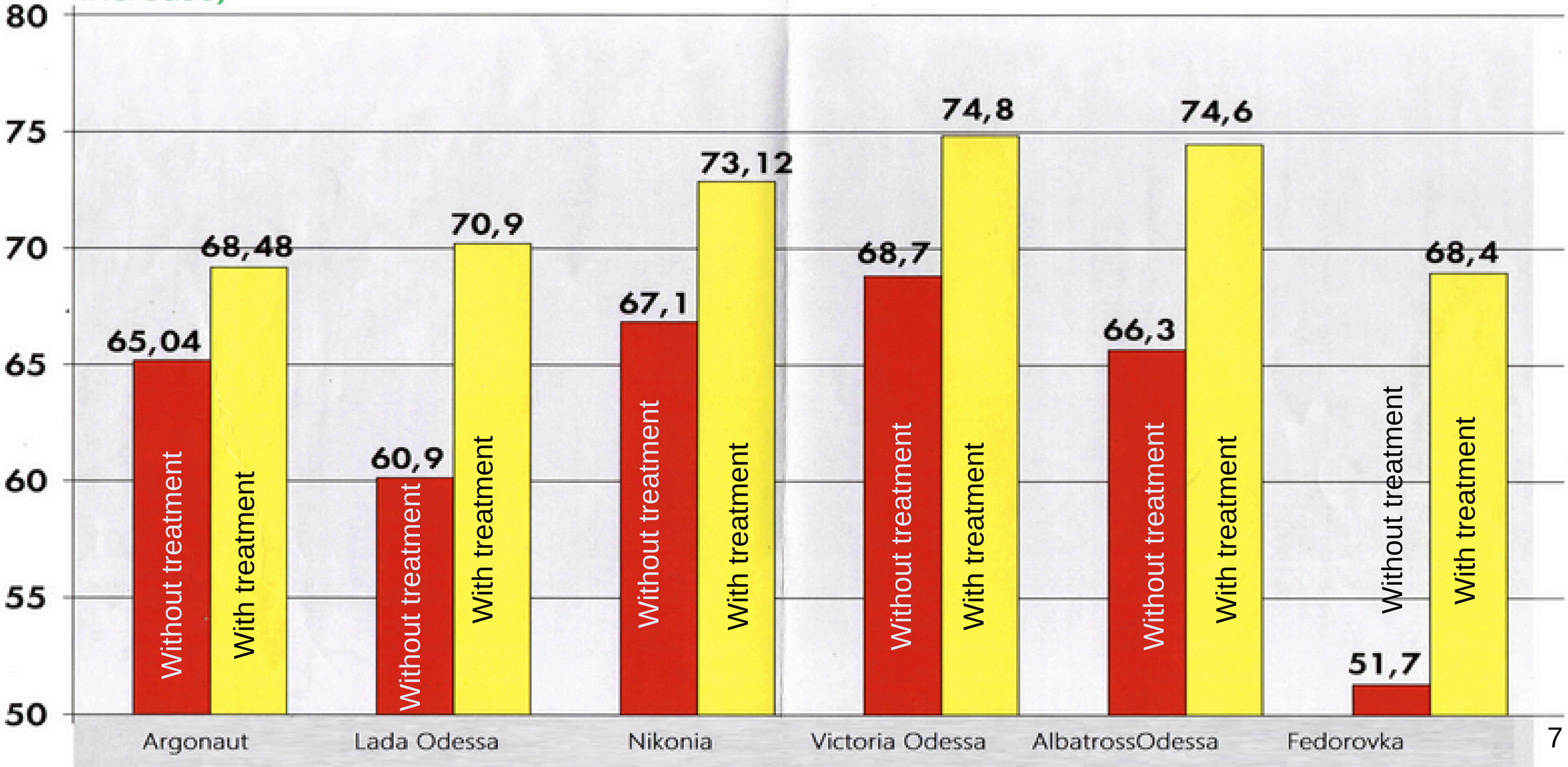
ACT OF IMPLEMENTATION A: A. VANTSOVSKYI

RICE INSTITUTE. IN 2005, THE UKRAINIAN ACADEMY OF AGRARIAN SCIENCES TOGETHER WITH THE SOUTHERN BRANCH OF THE DEPARTMENT OF INDUSTRIAL RADIO ELECTRONICS OF THE INTERNATIONAL ACADEMY OF INFORMATIZATION CONDUCTED RESEARCH ON THE EFFECT OF MICROWAVE STIMULATION OF RICE SEEDS ON PLANT PRODUCTIVITY AND GRAIN QUALITY. THE FIELD EXPERIMENT WAS CARRIED OUT WITH TWO SORTS OF RICE UKRAINE-96 AND ANTEY AND MODES OF SEED TREATMENT WITH A MICROWAVE FIELD. UNTREATED RICE SEEDS WERE USED AS A CONTROL. THE SEEDS WERE NOT TREATED WITH FUNGICIDES BEFORE SOWING. IT WAS FOUND THAT THE MICROWAVE FIELD INCREASES THE FIELD GERMINATION OF RICE SEEDS: IN THE UKRAINE-96 VARIETY BY 8%, ANTEY BY 5%. IN CONNECTION WITH THE LOW FIELD GERMINATION OF RICE SEEDS IN GENERAL (UKRAINE -96 - 28.0%, ANTEY - 29.1% IN THE CONTROL), THIS INCREASE IS QUITE SUBSTANTIAL. THE YIELD OF TREATED SEEDS WAS: 95.1 CENTNERES/HECTAR IN THE UKRAINE-96 VARIETY AND 78.5 CENTNERES/HECTAR IN THE ANTEY VARIETY (YIELD INCREASE COMPARED TO THE CONTROL - 10.2 CENTNERES/HECTAR AND 7.1 CENTNERES/HECTAR , RESPECTIVELY).

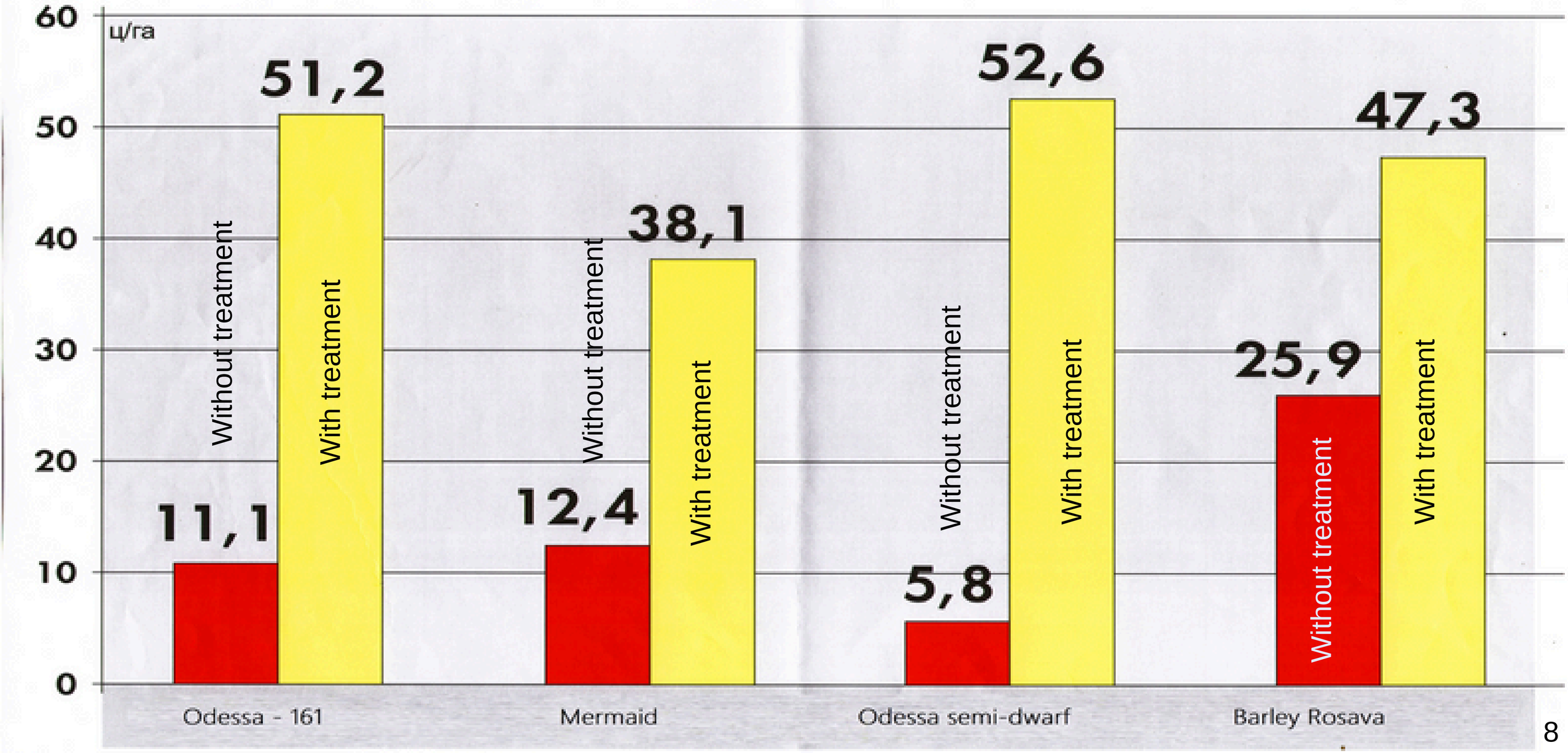
* GRAIN CONTAMINATION FROM TREATED SEEDS DURING CLEANING IS 3-5% LOWER THAN IN THE CONTROL DUE TO A SMALLER AMOUNT OF EMPTY AND THIN GRAINS, THIS INDICATES THAT MICROWAVE FIELD TREATMENT INCREASES THE FULLNESS OF RICE GRAINS. THE VITREOUSNESS OF THE RICE GRAIN ALSO INCREASED BY 6-8% AND THE CRACKING RATE DECREASED BY 2-4%, WHICH INCREASED THE TOTAL GRAIN YIELD BY 0.5% AND THE YIELD OF THE WHOLE KERNEL BY 2%. BASED ON THE ABOVE, THE INFLUENCE OF MICROWAVE TECHNOLOGY ON THE PRODUCTIVITY AND QUALITY OF RICE GRAIN IS A PROMISING DIRECTION OF RESEARCH AND REQUIRES FURTHER STUDY.

DEPUTY DIRECTOR FOR SCIENTIFIC WORK R.A. VOZHEGOVA
PHD. CHIEF LABORATORY OF A/X ANALYZES A.M. MARUSHCHAK

Results of experiments on stimulation of elite seeds of six varieties of winter wheat (yield increase)



Results of the experiment on the influence of the field mw on phytopathogens of winter wheat and winter barley seeds (hard smut, fusaria, rot)



An experiment on the resistance of winter wheat Donetskaya - 48 for frost resistance.
Productivity of 25 centners per hectare control without crop.
NPF "ASKO-Universal" and Vinnitsa OSHGS UAAN

-35°C

PRODUCT OVERVIEW

Technical characteristics:

Power supply, V 110/220;

Power consumption, kW 3.0 - 6.0;

Productivity, ton/hour 0.4 – 2.0;

Weight, kg 210;

Dimensions, cm 70 x 90 x 206;

Loading - from above.

Cost price of one piece $14700

Production: 10 units per month
Scalability in short terms up to 100+ units

***Old design model.**
New design under development

EXIT PLAN

Brief Answer:

- We plan to sell the company as its valuation grows by gradually selling shares.

Detailed Answer:

- Once Parostok reaches a valuation of $100 million, the founders will consider selling a portion of their shares. The same approach will be applied upon reaching a valuation of $1 billion. Share sales will continue thereafter at the founders' discretion until their ownership is reduced to 1-5%.

ABOUT US IN THE PRESS

Science&Business – GIST Pitch Days: перші підсумки

Учора, 8 березня 2023 року, розпочався Science&Business – GIST Pitch Days – захід для науковців та підприємців з готовими наукоємними рішеннями, на якому є можливість презентувати свої стартапи та отримати…

mon.gov.ua /

PAROSTOK

Web Summit / Nov 10

Фестиваль Sikorsky Challenge 2024 відбувся! Вітаємо всіх учасників!

Блог Стартап Школы Sikorsky Challenge

sikorskychallenge.com

Фіналісти програми EIT Founders2Founders отримали гранти на …

EIT Founders2Founders – це щорічна програма, створена для підтримки молодих стартапів у їхньому…

Vacuum Deep Tech Acceleration / Dec 18, 2024