

ABOUT COMPANY

AGRILAB – is a company, which is specialized on the implementing of precision agriculture technologies. It's a team of major expert with international devotion. We offer effective tools to reduce the profit of agribusiness.

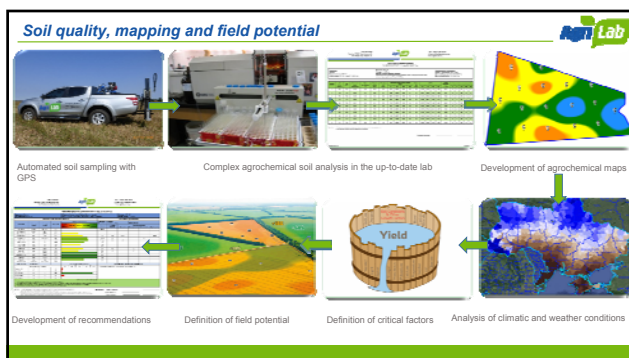
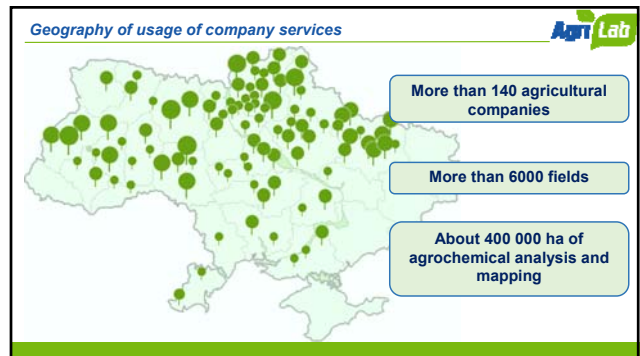
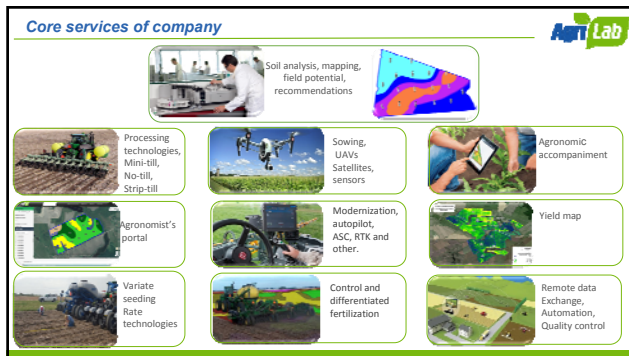
AGRILAB services

- Technological expertise of agricultural production
- Complex agrodiagnostics of field
- Diagnostics of plant nutrition during vegetation
- Technique's modernization for realization of precision agriculture elements
- Agronomist's portal and GPS monitoring of techniques
- Development of effective technological decisions and agronomic accompaniment

COMPANY BENEFITS

- AGRILAB – is one of the leaders in Ukraine according to Forbes rating on innovativeness
- Practical experience of systematic usage of precision agriculture technologies recognized by world experts
- Complex products, individual selection of services and professional accompaniment
- Experts from Europe, the USA, Canada
- Partnership with leading labs and scientific centers
- Adapted technologies and standards of Europe and the USA
- Assessment tools of field potential, that allow effectively implement management of expense

INTERNATIONAL COLLABORATION AND EXPERTISE



Agro diagnostics. Sampling with GPS

1. Selection for homogeneous areas of soil fertility

2. Automization and precision selection

3. The unique system of control and coding samples

4. Each sample tied to GPS coordinates

5. Each sample fixed on the AgriLab portal online

6. The quality and objectivity

СТОВ "ЛІЩИНСЬКЕ"

Сінгури 050707333 (2.9 га)

Зона 1 (дуже низький)

128794

Diagnostics of feeding plant on vegetation

Allotment of homogeneous zones and sampling

Use of satellite data of vegetative crop mass in the field (index NDVI), which allow accurately identify homogeneous areas of the state and plants development, develop routes and conduct soil sampling

Soil analysis
Winter and spring cereals - pH, mineral nitrogen($\text{NO}_3 + \text{NH}_4$), mobile sulfur(S-SO₄);
Corn - pH, mineral nitrogen ($\text{NO}_3 + \text{NH}_4$), mobile sulfur(S-SO₄) and Zinc(Zn).

Diagnostics of feeding plant on vegetation

Costs optimization on use of nitrogen fertilizers up to 60%

Yield increase in the areas with high potential up to 40%

Operational needs definition in feeding

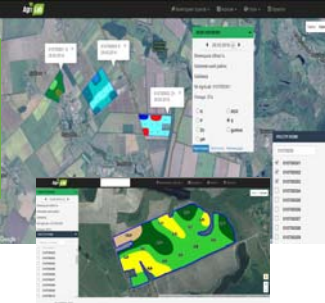
Efficient use of nitrogen and micro fertilizers depending on their soil content, water stocks and plant potential in the particular field or field area

Fertilizers redistribution in areas under mixed characteristics, in particular nitrogen content and plant development condition

Costs optimization and yield increase on fields

Portal of agronomists– precision agriculture

- Access to field data of client on the AgriLab portal
- Plan/fact of previous year
- Satellite monitoring
- Assessing the impact of technological, soil and climatic condition on yield formation
- Recommendations for fertilization system on 3 crops
- Map development for techniques



Differentiated fertilization


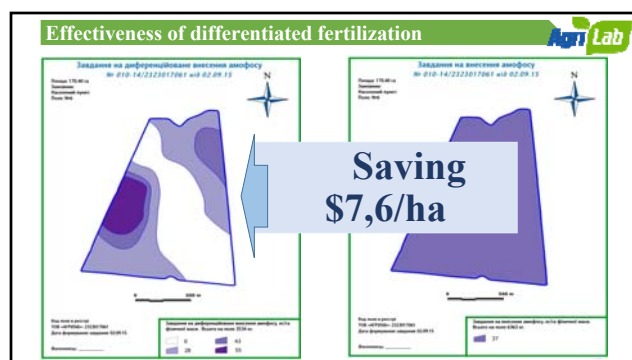
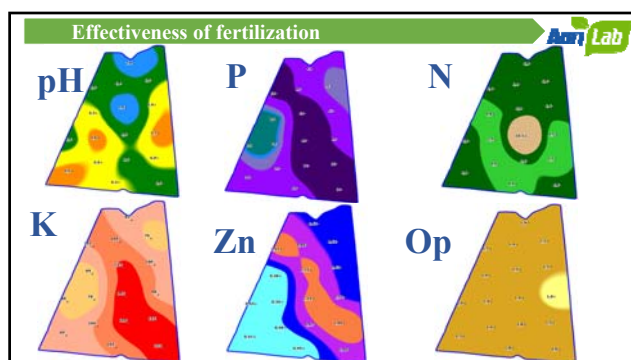
Variate rate fertilization system depending on the distribution of feeding elements on the field.

Expecting benefits and investment return

Increased yields up to 30%
Save NPK fertilizers from 5 to 40%
Rational distribution of fertilizer on the field
Quality control of fertilization
Accurate cost accounting material on field
Payback of 1 aggregate from 1 marketing year

Technology allows :

- Use of mineral fertilizers considering optimal balance of nutrition elements, according to crop needs in a particular inhomogeneous area of field
- Maintained a positive balance of nutrition elements within field
- Fertilization is carried out on the each field area necessary amount of fertilizers
- Excessive fertilization and their unproductive losses aren't occurred.
- Control of quality and fertilization quantity carry out

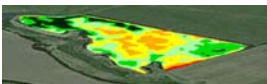
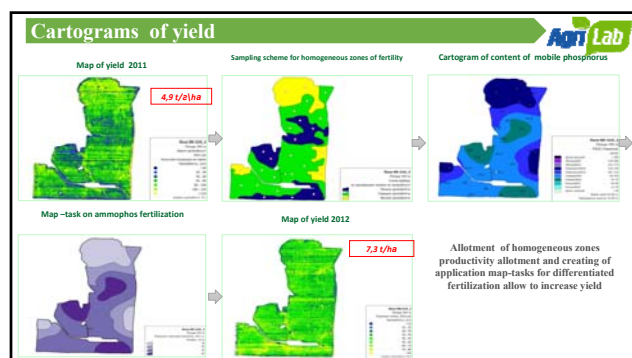



Effectiveness of differentiated N fertilization

Yield increase depending on potential of field areas (Chernihiv region)

Area potential	N kg d.f./ha	Yield, t/ha	Increase, t/ha	N \$/ha
Differentiated fertilization				
Low-productive	38	4,3	-0,2	53
Middle-productive	65	7,0	+0,3	91
High-productive	86	9,2	+1,1	120
Average	64	6,8		88
One norm on the field				
Low-productive	70	4,5		98
Middle-productive	70	6,7		98
High-productive	70	8,1		98

➤ Saving 10 \$/ha
➤ Yield increase 0,4 t/ha

Locally-strip fertilization

- Fertilizer concentration in the narrow strip, where directly plant roots are situated
- Reducing of fertilizer norms to 20-50% comparing with surface spreading
- Implementation of technological operation complex in a single run (cultivation and fertilization of several kinds of fertilizers)

Locally-strip fertilization

Fertilization in the strip allows to reduce fertilizers norm on 20-50%.
Coefficient of use of fertilizers is increased

Locally-strip fertilization

Zone of efficient use of fertilizers Zone of unproductive use of fertilizers

Accommodation in a narrow strip Scattered over the surface

Effectiveness of locally-strip fertilization

- Better evolution of root system
- Increased utilization of the coefficient of feeding elements from fertilizers (especially phosphorus)
- Savings from \$40 to \$70/ha on phosphorus-potassium fertilization comparing with scattered fertilization

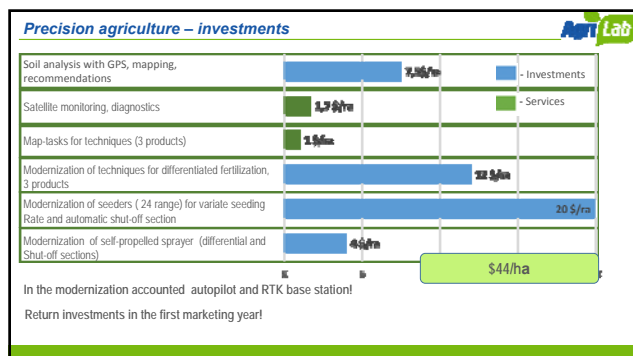
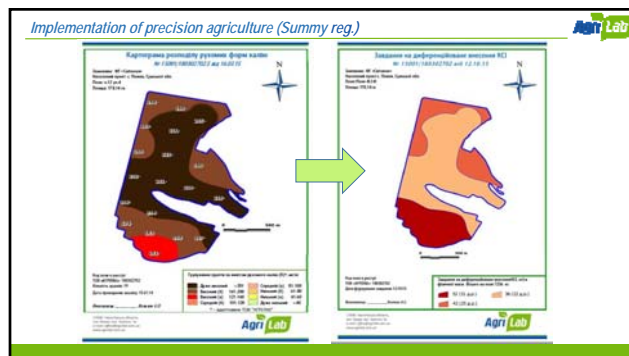
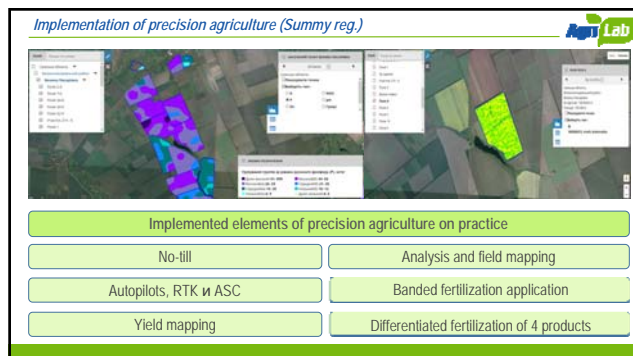
Agro firm (Sumy region)
Increasing the yield of sunflower on 16-20% more from hectare, comparing with utilization of scattered fertilization technology

Effectiveness of techniques modernizationi

Economical effectiveness and payback of cultivator modernization

Effectiveness of precision agriculture elements

<p>15-27% Resources optimization</p>	<p>Optimization N - 30%</p>
<p>6-12 % Effectiveness</p>	<p>Savings of fertilizers 20-50% Yield + 16-23%</p>
<p>Savings of seeds 3-8% or \$4,5-12/ra</p>	<p>Savings of fertilizers 0-40% Yield + 3-20%</p>



Thank you for attention!

With best regards,
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