Prime Lab Tech

The agrochemical laboratory PLT is accredited according to ISO 17025 international standards

Kyiv region – 2025

HISTORICAL REFERENCE

- **2014**
  Year of foundation of the company
- **2015**
  Attracting a USAID grant under the Feed the Future program,
- **2016**
  Launch of the agrochemical laboratory
- **2017**
  mastering new techniques:
- Agrochemical analysis of fertilizers
- Chemical Analysis of Water
- analysis of seeds for quality indicators.

2018

involvement of a USAID grant under the ARDS program "Analysis for Pesticide Residues“

2019 - 2021

mastering the "Precision Agriculture" service

ADVANTAGES OF COOPERATION WITH «PRIME LAB TECH»

Established in 2014, today the Prime Lab Tech laboratory covers about 2000 farms and agricultural holdings with agrochemical services. These are high-tech enterprises that do not stop their development, leaders in the agricultural business. Cooperation with Prime Lab Tech, for these enterprises, is a necessity to strengthen their status.

Prime Lab Tech, as a reliable partner and assistant to farmers, works closely with world leaders in the agricultural market – BAYER, BASF, SYNGENTA, KWS, NPC UKRAINE, LIMAGRAIN, RDO UKRAINE. We have united these professional organizations with our service in order to create conditions for the rapid development of all participants in the agricultural market of Ukraine who follow innovations and high technologies.

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ADVANTAGES OF COOPERATION WITH «PRIME LAB TECH»

The Prime Lab Tech laboratory is accredited according to the ISO 17025 system and has repeatedly participated in USAID programs in 2015 and 2018 and successfully implemented them. The work of the laboratory is focused on the introduction of precision farming – a set of measures aimed at increasing yields, reducing costs and preserving the potential of soil fertility with the help of modern technologies and equipment, which includes:

1. Precise field contours in electronic form using a GPS receiver
2. Sampling of soil samples by modern automatic equipment, taking into account zones of heterogeneity with GPS-binding to sampling points, which ensures high accuracy
3. Agrochemical analysis of soil samples: laboratory examination of soil samples for the content of macro-, meso-, microelements, humus and acidity level. The analysis is carried out on modern equipment, according to the international standard ISO 17025.
4. Development of cartograms on the content of nutrients in the soil based on the results of laboratory studies according to GPS coordinates in the field
5. Development of recommendations by agronomists-soil scientists for a differentiated nutrition system according to the active substance/physical weight of fertilizers
6. Creation of an electronic map of differentiated fertilization and/or variable seeding rate in the fields, taking into account zones of heterogeneity with GPS-binding to application points, which gives high accuracy and practical application.
7. Satellite Field Monitoring: "Satellite Tool for Precision Agriculture" PrimeLabTech

Thanks to modern laboratory equipment and highly qualified specialists, the test results are as accurate as possible and fully reflect the real picture for the studied soils.

LIST OF BASIC SERVICES

1. Agriculture
1.1. Agrochemical soil analysis
1.2. Plant diagnostics and nutrition optimization
1.3. Seed certification and additional quality indicators
1.4. Chemical analysis of water.
1.5. Agrochemical analysis of fertilizers and ameliorants
1.6. Indicators of quality of agricultural products
1.7. Pesticide diagnostics. Detection of toxic chemicals in soil and crop products
1.8. Recommendations for the fertilization system
1.9. Precision farming
2. Food & Food Products
2.1. Analysis of the content of pesticide residues in all agricultural products: Fruits, Vegetables, Berries, Root Crops, Flour, Cereals

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QUALITY OF WORK

All agrochemical laboratory tests are carried out in accordance with regulatory documents in the field of soil science, agrochemistry, soil protection and ecology - national standards of Ukraine (DSTU), national standards harmonized with international and European (DSTU ISO or DSTU EN), industry standards (GSTU), standards of organizations of Ukraine (SOU), interstate (GOST) and industry (OST) standards, guiding regulatory documents (CPD).

TECHNICAL EQUIPMENT OF THE LABORATORY

Spectrophotometer – nitrogen, phosphorus, sulfur

Flame Photometer – Potassium, Sodium

Atomic Emission Spectrophotometer – Trace Elements

Liquid Chromatograph with MAC Detector – Pesticides

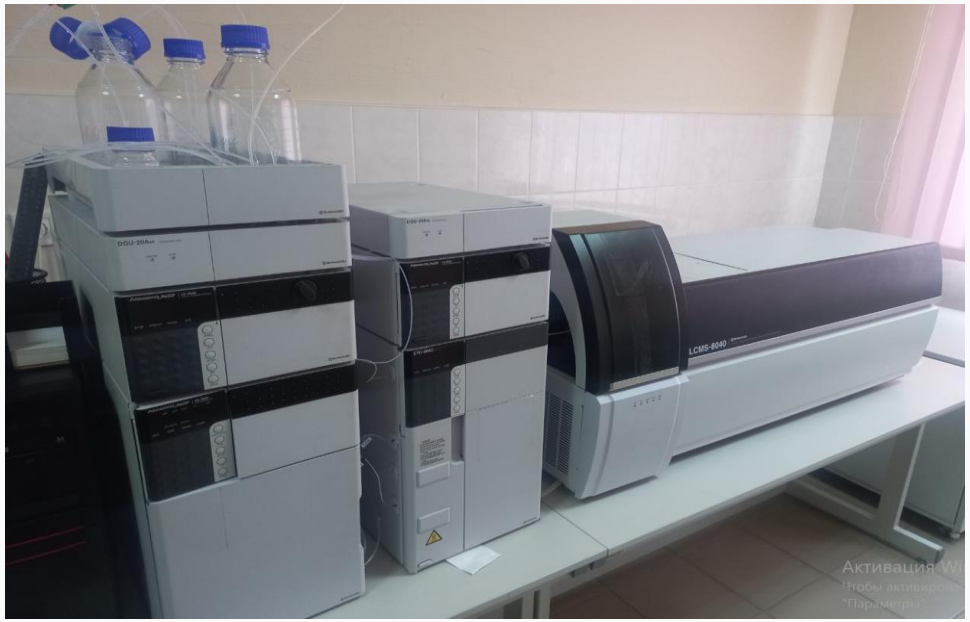
pH meter – acidity

Conductivity Meter – Electrical Conductivity

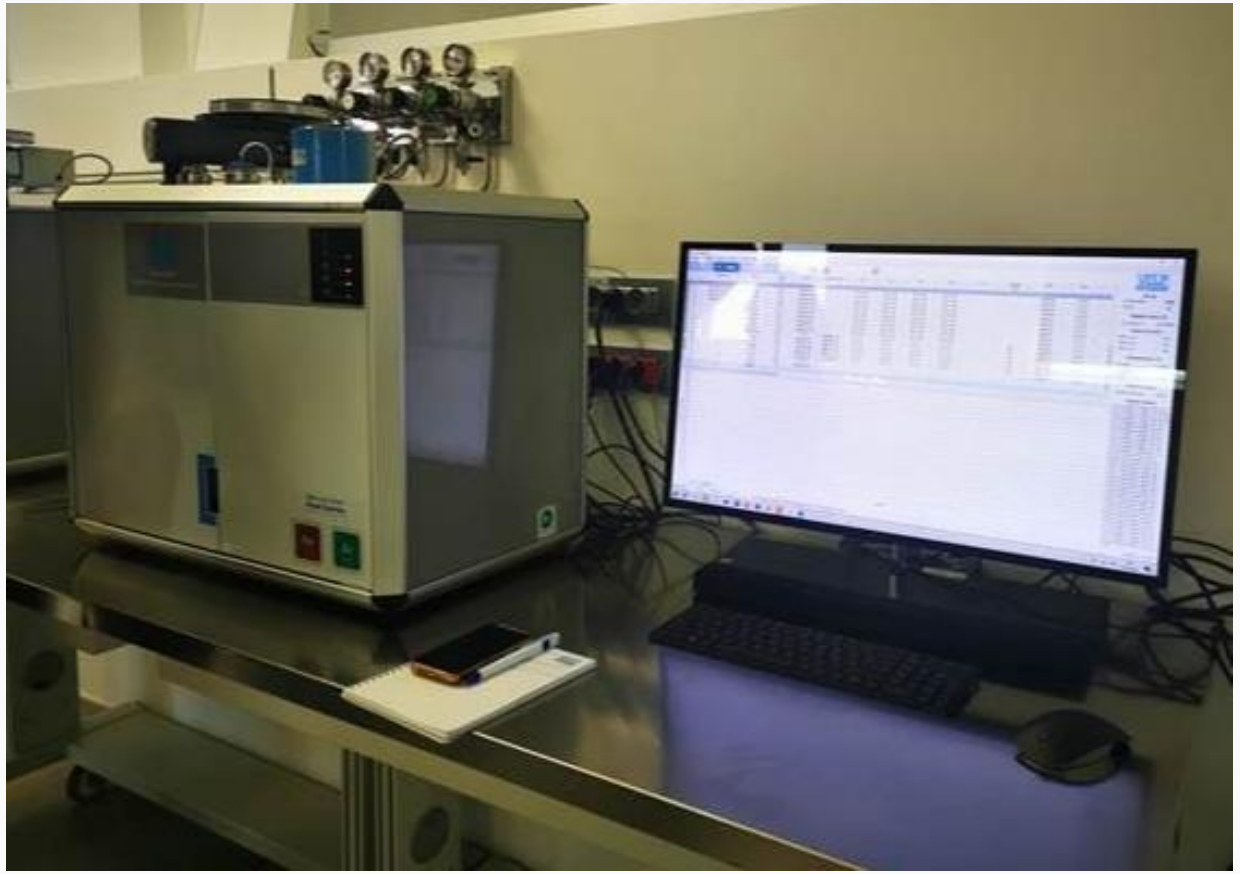
Climatic chamber – seed quality, microbiological processes, enzymes

Muffle furnace – dry ashing

TECHNICAL EQUIPMENT OF THE LABORATORY



TECHNICAL EQUIPMENT OF THE LABORATORY



SAMPLING

For fast and high-quality sampling, we use automatic soil samplers, namely:

- Wintex 1000 – designed for sampling at a depth of 10 to 25 cm. The sampling rate is 38 samples per hour, 10 mini samples per sample. Thus, 380 mini samples can be made per hour.
- Nietfeld-based sampler – for sampling at a depth of 10 to 30 cm. A mixed soil sample is collected automatically in 15-30 minisamples. One mini-sample extraction cycle takes 3-5 seconds.

ALGORITHM OF WORK

- Receipt of the application from the Customer by e-mail or in
- telephone;
- Coordination of the date and time of the specialist's visit to the site for sampling;
- Departure of an appropriate specialist, work on sampling, packaging and transportation of samples;
- Preparation of samples for analysis and direct laboratory analysis of soils for certain indicators in accordance with the relevant regulatory documents;
- Processing of the results of laboratory analysis of soils, drawing up a protocol, recommendations, cartograms;
- Transfer of data to the customer in an agreed format to servers via FTP