TOPRAQ

WELCOME TO THE ERA OF DATA-DRIVEN AGRICULTURE!

Artificial Intelligence, Sensors, Big Data and **Algorithms** will be the future of agriculture.

At TOPRAQ, our primary objective is to enhance farmers' decision-making by delivering **actionable agricultural data through our Subscription Model,** rather than just providing hardware and raw data.

KEY BENEFITS

✓ Real-time data flow for effective field monitoring

✓ Optimizing growing conditions tailored to each plant

✓ Enhancing crop quality for longer shelf life and higher profitability

✓ Gaining control over input costs

✓ Reducing risks associated with employee errors

✓ Promoting sustainable agriculture by minimizing resource waste

We're not just envisioning a future of sustainable agriculture; we're building it! Join us in creating a productive and eco-friendly agricultural environment.

Up to 45%
Water Saving

Up to 52%
Electricity Saving

Up to 18%
Crop Yield Increase

Up to 40%
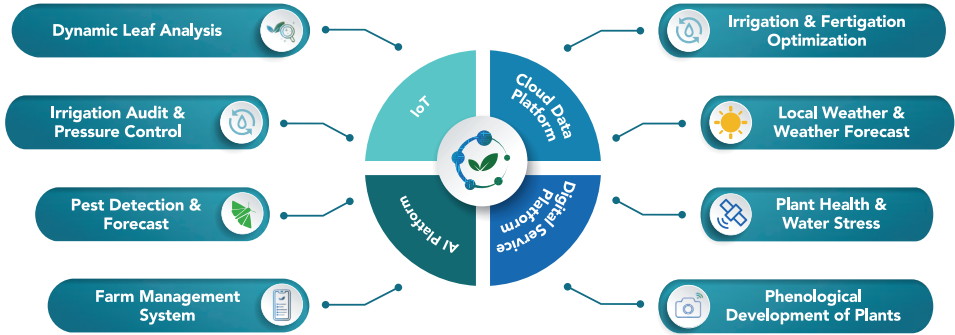**Fertilizer Saving**

Our goal is to extract actionable insights from agricultural data that is collected through sensors and other resources using Statistical Machine Learning and Artificial Intelligence, and deliver this holistic intelligence to farmers within digital services.

Dynamic Leaf Analysis

Irrigation Audit & Pressure Control

Pest Detection & Forecast

Farm Management System

IoT

Cloud Data Platform

AI Platform

Digital Service Platform

Irrigation & Fertigation Optimization

Local Weather & Weather Forecast

Plant Health & Water Stress

Phenological Development of Plants

WHY US?

We operate with 100% local capital.

We are one of the leading companies that use the power of Artificial Intelligence to derive actionable insights from the raw data gathered from the fields of our farmers.

With our Topraq Smart Assistant integrated into Telegram, we offer seamless real-time data flow and communication.

We develop our own agricultural technologies simple and user-friendly.

We offer our technologies at affordable prices with our unique Subscription (as a Service) Business Model.
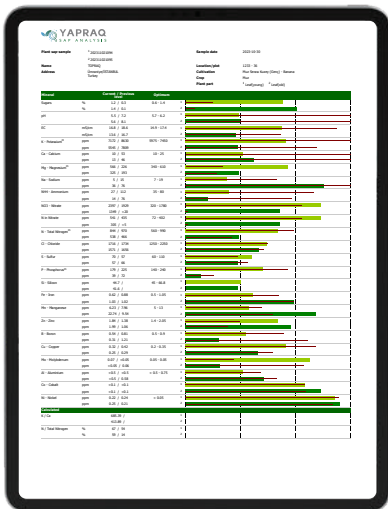
We provide direct product & service installation and technical support on fields.

YAPRAQ

Less Fertilizer, More Yield & Quality, Maximum Profitability!

Using **AI and advanced algorithms,** we analyze **nutrient levels from leaf sap** along with field data to **create custom-tailored nutritional prescriptions for each orchard.**

Extraction of leaf sap using a specialized method

A holistic approach to both old and young leaves

Real-time detection of nutrient needs

Assessment of the plant's nutritional status based on 23 parameters

Results that define all components and relationships necessary for photosynthesis

Current status of active nutrients present in leaf tissues

N   Mo   Ni   Mn   Ca   s   Zn

Listen to the Needs of Your Plants for
Sustainable Agriculture and Our Shared Future!

Benefits;

- Up to 40% fertilizer savings
- Detection of nutrient deficiencies 4 - 6 weeks in advance
- Increased disease and pest resistance
- Verification of fertilizer content accuracy and effectiveness
- Improved BRIX value, shelf life, and yield
- Stronger plant immune systems

Discover YAPRAQ Packages!

BASIC

Dynamic Leaf Analysis
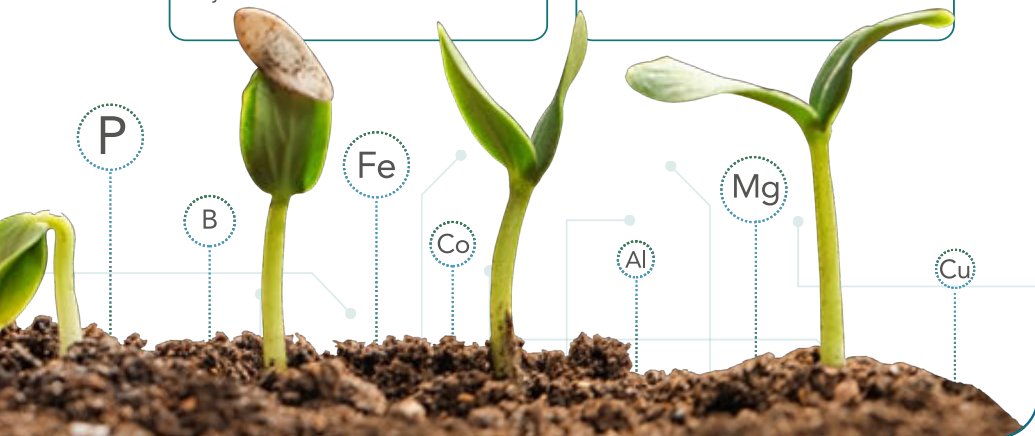
Agromatiq   **Topraq App**

- Real-time nutritional status of both young and old leaves through Dynamic Leaf Analysis
- End-to-end seamless farm management with Agromatiq: Farm Management System

NUTRI-TECH

Tailored Analysis Briefings

Nutritional Prescription

- Evaluation of your Dynamic Leaf Analysis results by our experienced Agronomist team
- Creation of customized nutritional prescriptions for your plants

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T-IRRIGATE
IRRIGATION OPTIMIZATION

Science-Based Irrigation Decisions with Artificial Intelligence and Sensors

T-Irrigate is our cutting-edge, AI-based solution that revolutionizes irrigation management. It provides tailored irrigation planning recommendations based on your plants' needs, enabling you to irrigate with **the right amount at the right time.**

- Soil Moisture & Temperature
- Soil Moisture & Temperature & EC
- Flowmeter
- Water Pressure

- Weather
- Rainfall
- Ultrasonic Flowmeter
- Leaf Wetness & Canopy Temperature

Data from soil sensors at different depths is **analyzed on the AI Platform.**

AI determines **critical irrigation thresholds tailored to each field.**

Our primary differences;

- Field managers and farm owners have full visibility into their fields **with real-time data**
- Detailed information about what's happening under the ground
- Efficient **irrigation audit** throughout the irrigation line
- Irrigation information in mm via **Rainfall Irrigation** data
- **Tonnage information** through Ultrasonic Flowmeter

We customize our T-Irrigate installations based on production methods, products, and irrigation infrastructure.

T-IRRIGATE
IRRIGATION OPTIMIZATION
BASIC

- 4 Soil Moisture & Temperature Sensors under the emitter
- Flowmeter
- EC Sensor (Optional)

T-IRRIGATE
IRRIGATION OPTIMIZATION
PLUS

- Sensors included in the T-Irrigate Basic package
- 2 Soil Moisture & Temperature Sensors between two emitters

T-IRRIGATE
IRRIGATION OPTIMIZATION
SAP FLOWMETER

Our solution that is designed to monitor the movement of plant sap from the roots to the leaves, which is essential for photosynthesis and other vital functions.Helping farmers to track water usage, water stress levels, and overall plant efficiency.

T-IRRIGATE
IRRIGATION AUDIT
PIVOT

By integrating various sensors such as **Rainfall, Water Pressure Sensor, Ultrasonic Flowmeter, GPS**, and others into pivot irrigation systems, we help our farmers conduct their pivot irrigations with enhanced efficiency and precision.

T-IRRIGATE
IRRIGATION AUDIT
PRESSURE

Placing **Water Pressure Sensors** on critical points over the irrigation line, we enable farmers to take prompt action.

Irrigation Start & Irrigation Cut-Off Levels	Daily Water Consumption of Roots	Root Zone Moisture Index	Daily Water Consumption of Roots	ET0 - Daily Evapotranspiration Rate
Saturation Point	Field Capacity	Wilting Point	Infiltration and Spreading	Effects of Rainfall and Irrigation Under the Soil

☀ T-WEATHER
A G R O   S T A T I O N

T-Weather is a smart meteorological station where
you can remotely access your local weather data in real-time.

Improving the quality & efficiency of crops	**Controlling input costs & increasing profitability**	**Creating and tracking ideal growing conditions**	**Disease prediction with data analysis**

- ☁ Temperature & Pressure
- 🌧 Rainfall
- 💧 Relative Humidity
- 🏴 Wind Speed & Direction
- ☀ Solar Radiation
- 🍃 Leaf Wetness & Canopy Temperature

It is also a smart assistant that supports
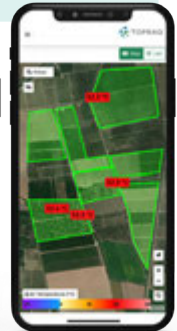farmers with **critical calculations** to make
the right decisions.

- 🌱 Chilling Hours
- ♨ ET0
- 💧 Dewing Point
- ❄ Degree Day
- ☀ Growing Degree Day

Empowering our farmers against unpredictable weather events.

Weather Forecast

We provide clear **15-day weather forecasts** to simplify production processes and ensure that necessary precautions are taken.

- Rainfall
- Temperature
- Humidity
- Snow
- Frost
- Hail
- Wind Speed
- Gust
- Cloud Cover

Frost Warning

We send automatic **"Low Temperature Alarm"** notifications to farmers when temperatures drop below their set levels, assisting them in reducing the risks associated with frost.

T-TRAP
PHEROMONE TRAP

T-Trap is an automated AI-based pest detection technology that enables real-time pest control.

It provides a real-time and precise pet population overview that empowers your plant protection decision-making process.

Monitoring all kinds of insects which can be lured into insect traps
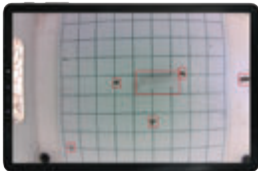
Saving on pest control cost

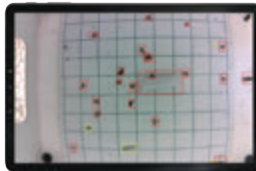Optimizing pesticide timings, less chemicals, decrease the residue levels in crop

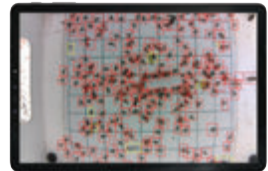Executing less field visits and more efficient pest control

Real-time monitoring

June 4

June 21

July 12

AGROMATIQ
FARM MANAGEMENT SYSTEM

Our solution offers farmers a streamlined approach to farm management, simplifying tasks such as fertilization and spraying calenders, field observations, pruning, and resource management. This reduces operational burdens and boosts efficiency.

- Resource Management
- Field Management
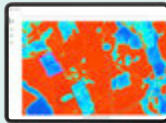- Employee Management

T-EARTH
CROP MONITORING

By continuously monitoring a variety of plant indices through satellite imaging, we assist our farmers in making accurate and timely decisions concerning plant nutrition.

Plant Health Indices:
Indicators that forecast the plants' growth potential by measuring the photosynthetic performance.

Water Stress Index:
A measurement used to detect the water stress level of plants.

Nitrogen Status Index:
By monitoring nitrogen levels, we assess plant growth rates, development, and overall productivity.

T-CAMERA
PHENOLOGICAL CAMERA

Using T-Camera, which can be integrated into a current station or installed independently, our farmers have access to real-time images from their fields, monitoring the phenological development stages of their plants remotely.

April 13

July 6

Real-Time and Scheduled Agricultural Insights!

Topraq Smart Assistant is an AI-based BOT software built within Telegram to help users communicate with their systems on a real-time basis.

Meteorological Data, Calculations & Alarms
▸ Temperature, Min. & Max. Temperature
▸ Rainfall
▸ Degree Day
▸ Chilling Hours
▸ Growing Degree Day

Irrigation Optimization & Audit
▸ Irrigation Planning
▸ Irrigation Duration
▸ Irrigation Start & Cut-Off
▸ Active Irrigation Inquiry
▸ Pressure Abnormality Alarms

With our on-site team and instant support through Telegram, we're always ready to assist you whenever you need it!

24/7 Our Topraq Support team of dedicated agricultural engineers

Our sales team, available to support you at any time

Fast, personalized support for all your installation and maintenance needs from our expert technical team

11+ Countries | **2600+** Stations | **645000+** Decare Fields | **1800+** Users

Ukraine
Romania
Bulgaria
Bosnia and Herzegovina
Uzbekistan
Türkiye
Colombia
Azerbaijan
Pakistan
Chile
Lebanon

60+ Crops

Orange • Tomato • Mandarin • Potato • Walnut • Lemon • Olive • Pistachio • Grape • Apricot
Almond • Hazelnut • Sugar Beet • Cannabis • Blueberry • Peach • Pomegranate • Apple •
Sunflower • Cotton • Avocado • Mango • Dragon Fruit • Banana • Eggplant • Cherry • Pepper
Wheat • Strawberry • Grapefruit • Plum • Sour Cherry • Chokeberry • Nectarine • Pear
Kiwi • Asparagus • Persimmon • Quince • Pea • Tobacco

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+90 534 221 63 05