TARX

TarX

Soil Analysis Device



TARX

TAC
TOPRAK ANALİZ CİHAZI

Technical Specifications

Parameter	Soil Probe	Main Machine Lidar Scan Data (0–200 cm, 6 depth layers)	Unit
Soil Moisture	Measures (0–100%)	No	%
Soil Temperature	Measures (−40 … +80 °C)	No	°C
Electrical Conductivity (EC)	Measures (0–20.000 µS/cm)	No	µS/cm
pH (H_2O)	Measures (3–9 pH)	Yes (pH value)	pH
Salinity	Measures (0–1000 ppm)	No	ppm
Nitrogen (N)	Measures (0–1999 mg/kg, hızlı sensör tahmini)	Yes (Total N, g/kg)	mg/kg / g/kg
Phosphorus (P)	Measures (0–1999 mg/kg)	No	mg/kg
Potassium (K)	Measures (0–1999 mg/kg)	No	mg/kg
Soil Organic Carbon (SOC)	No	Var (g/kg)	g/kg
Organic Matter (OM)	No	Yes (derived from SOC)	g/kg
Cation Exchange Capacity (CEC)	No	Yes (cmol(+)/kg)	cmol(+)/kg
Sand Percentage	No	Yes (%)	%
Silt Percentage	No	Yes (%)	%
Clay Percentage	No	Yes (%)	%
Bulk Density	No	Yes (g/cm³)	g/cm³
Coarse Fragments	No	Yes (%)	%
Depth Layers	Single-point measurement (at the inserted location)	0–5, 5–15, 15–30, 30–60, 60–100, 100–200 cm	

Certificate Number : HK2207123024E
Report No. : HK2207123024-1ER
Registration Date : Aug. 02, 2022

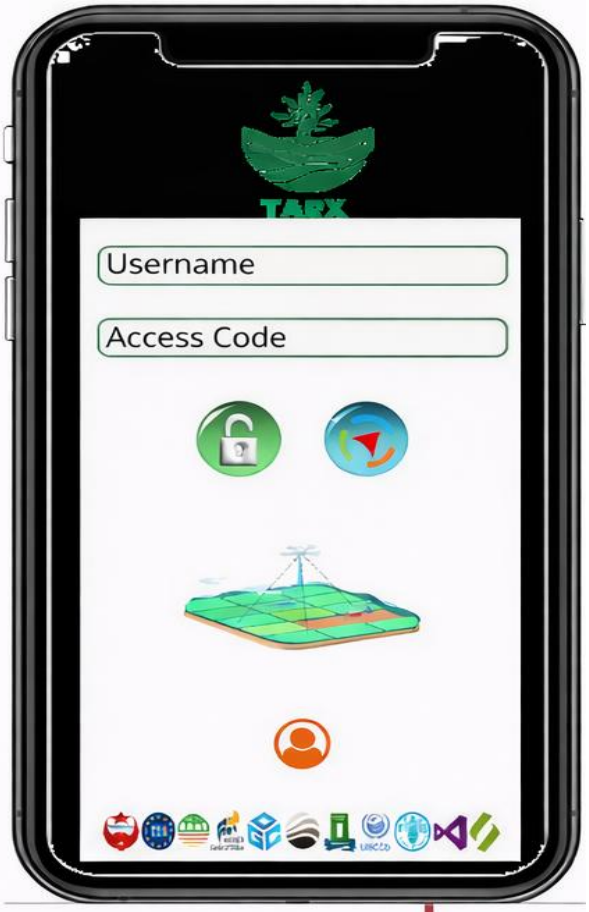
Certification Manager

The information of the certificate can be checked through www.cer-mark.com. The CE mark which is shown on the certificate can only be used under the conditions that the products complete with all of the relevant Directives of CE Declaration of Conformity. The Manufacturer should be responsible for the internal production control so that the products complied with the essential requirements of the above mentioned Directive(s). Certificate holder must notify all changes to the original certification laboratory of HUAK.

CE

The warranty period is 2 years from the invoice date.

1. Insert the Analysis Probe to the depth you wish to analyze.
2. Soil moisture should be at least 20%, so moisten the spot where you insert the Analysis Probe with irrigation water.
3. Connect the loose cable coming out of the Main Unit to the Control Tablet.
4. When the top green light of the Main Unit lights up, it's connected; when the second light is on, it's ready to measure. 3 beeps → analysis recorded.
5. Open the TAC app on the Control Tablet, log in with the username and password.
6. Tap and wait for the "Analyze with AI" button.
7. Once results appear, you can generate a recommendation report by selecting land size and plant type.
8. Print or share a report using the download button either in the top left.



Control Tablet

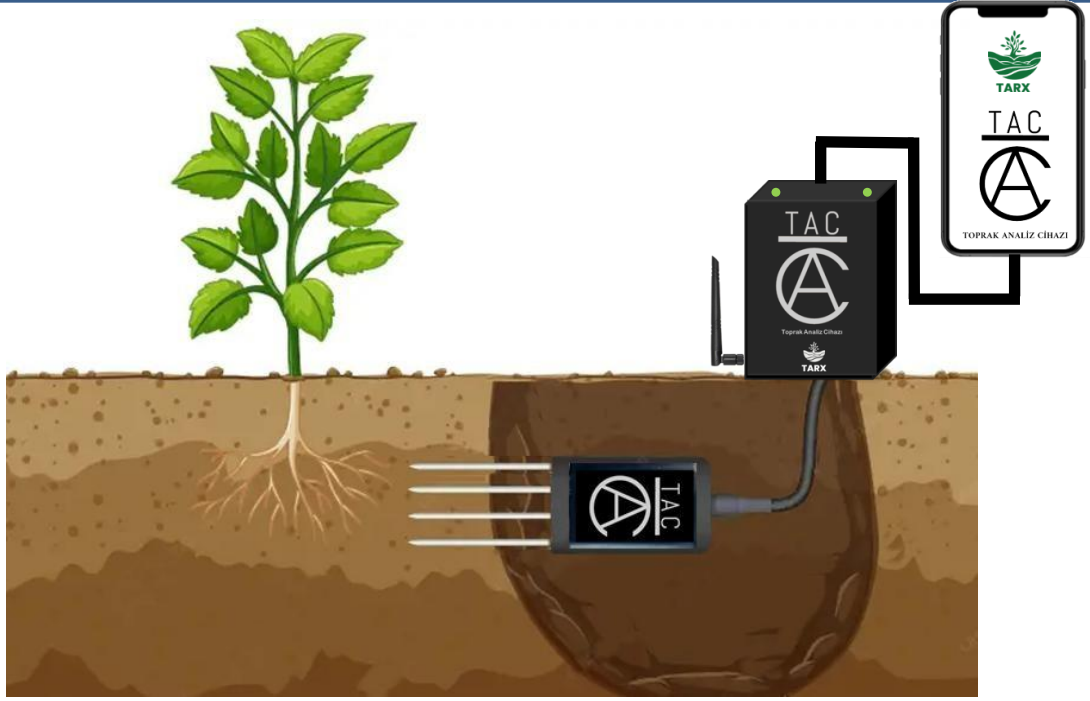


Main Unit

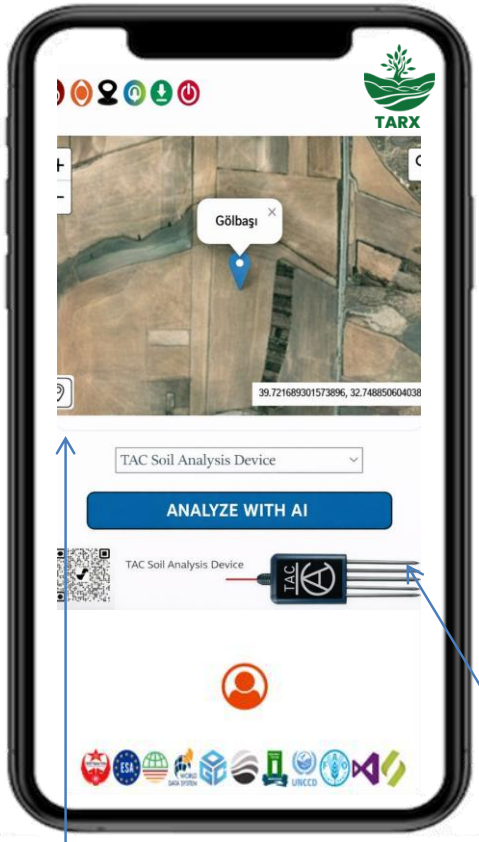
Soil Analysis Probe



TAC Soil Analysis Device







Determine Your Location
(Auto Focuses)

"Analyze with AI"
Click the Button and Wait

✓ (Insert the Analysis Probe into the Soil)

✓ (Two Green Lights Should Illuminate on the Main Machine)

✓ (After Hearing 3 Beeps)

Log in with your Username and Password

Climate Analysis



Average Max Temperature:	18.7 °C
Average Min Temperature:	8 °C
Annual Precipitation:	453.2 mm
Highest Temperature:	36.2 °C
Lowest Temperature:	−6.6 °C
Annual Rainy Days:	141 days

Toprak Fiziksel Analizleri

Soil Physical Analyses

Clay Ratio: 32%

0-5 cm

Texture: Loam Clay
Clay Ratio: 35%
Sand Ratio: 27%
Silt Ratio: 40%
Soil Density: 137 kg/m²
pH: 7.6 Stable

Organic Carbon Density: 210 kg/m2
Organic Matter: 3.00 %
Cation Exchange Capacity: 232 cmol(+)/kg
Total Natural Nitrogen Fixation: 689 mg/kg (0.0689%)
Field Saturation Point: 35%
Wilting Point: 19 %

15-30 cm

Clay Ratio: 35%

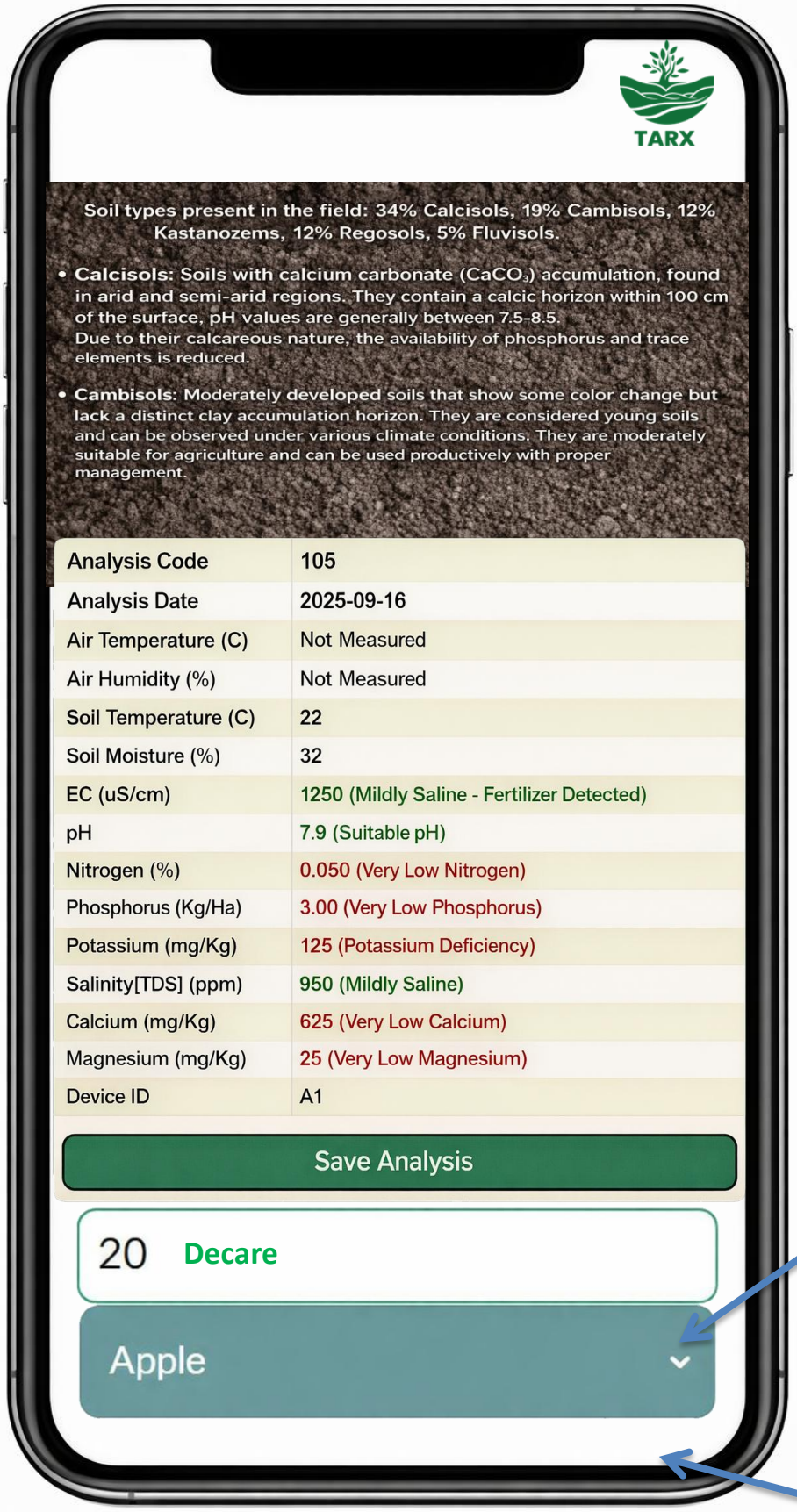
30-60 cm

Clay Ratio: 35%

60-100 cm

Clay Ratio: 35%

100-200 cm



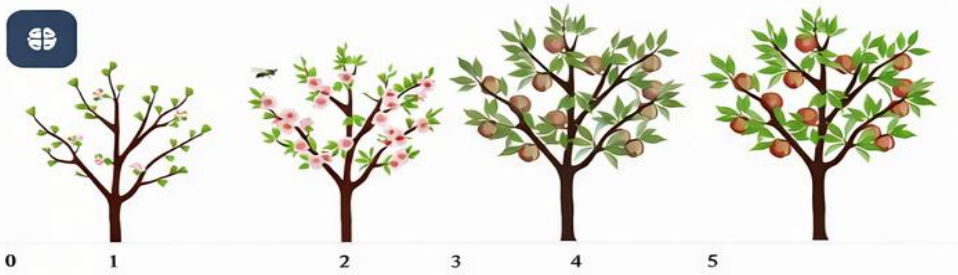
Land area enter the number in decares.

One for the report choose plants and AI supported report instantly create.

TARK

Crop	Root Depth (Sm)	Min Temp (C)	Max Temp °C	Min pH	Min pH	Min pH	Daiiy Water Req.	Potassium Req. (kg/da)
Apple	150	10	15	7.0	1.5	2	5	8%

Root Depth (cm)	Not (Mun/Kg)	Min (Man/Kg)	Min Salinity Req. (dS/m)	Max Salinity Req. (dS/m)	Potassium Req. (kg/da)
150	15	800	1.5	2	5 - Sandy soil



0. At the start of bud break period (stage **0**), add 150 grams of 0.2% **metallic copper fungicide (20% Metallic Copper Equivalent)** to 100 liters of water per hectare and mix tlb waar 1000 liters of water. This spraying contirucs for nıl days unith flowers eban opening. this spreys gerrealy. MAP 12-61-0 foliar fertilizer is appiled once or twice at 2 kg per decare during the flowering veing period.

1. In the fruit bud break period (stage 1), add 100 cc LAMBDA-CYHALOTHRIN to 100 liters of water and mix pot hectare when flower caps stan falling off young twigs. Mereril transitioning into young twigs go through a period of hanging caps before fully opening and entering the earning flowering stage. Lambda-cyhalothrin targets weevils until this period ends at stage 5.

2. At this period (stage 2) when days are long enough for the flower caps to **falll**, add 10 cc **of spinosal** SN+10% to 100 liters of water and mis per hectare as it spetrolc **apple** notcher and tortrix leafrollers. Potassium nitrate foller fertilizer F-appiied. O lihern feillem-phorus deficiency at the period of fruit set or frut,shrinkage. MAP 12-61-0 foliar fertilizer is applied.

3. In pink bud stage (stage 3), add 200 cc AZOXYSTROBIN + 12% DIFENOCONAZOLE and mix in with 100 liters of water per hectare. This mix is used in powdery mildew them-gement, as well as scab/twitch. If can be applied with a suttable inserticide for insect contnol, and both, fungicides are put in the same tank and applied or replaced.

4. If spider mites are seen and increasing, spray 1000 liters 0.8% 2% elemental sulfur in 100 liters of water periody vorrnity. O:, 1000 liters Dosi 5 formulation, at 2 kg per decare at 0.2% rate, are used sprayed.

5. If fruits do not grow as desired. **Ammonium sulfate is applied** in the soil. Ammonium sulfate is applied at 9 kg per decare 11/10 hectare) is applied 1jr very caol spring periods for potassium loosening. Microelement-replenishing fertilzers, mix.Element Sulfur tormulade in spray.

5. Sieiler mites be are seeen and increasing, spray 1000 liters 0.9% elemental sulfur in 100 liters of water per hectare vreneily. O+, 1000 liters Dosi 5 formulation, at 2 kg per decare at 0.2% rate, are used spreyed.

6. If fruits do not **grow as desired. Ammonium sulfate** is applied in the soil. Ammonium sulfate is applied at 3 kg per decare 11/10 hectare) is applied in very caol spring periods for potassium loosening. Microelement-replenishing fertiizers, mix.Element Sulfur 400 g arags and spray.

TARK

In sustainable productivity, 20 decares of apple crop requires 7,000 tons of water annually. During a rainless period in your field, daily water requirement is **30 tons.**

Ministry of Agriculture and Forestry Prescription Writing Go 60-15958
Union of Turkish Architects and Engineers License No: ZMO-15402
Soil and Water Analysis Authorization No: 10-117-15

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TAC

SOIL ANALYSIS DEVICE