



Technology of Future

Understanding the Language of Nature

# ApiCo - Technology of Future

We care about nature

We are keen on technologies

Smart technologies teach us how to understand the language of nature.



Our strengths are hardware development, measurement of physical quantities, IoT, and Clouds.

We focus on:

- Smart agriculture
- Smart beekeeping

# GreenScape

Comprehensive expert system for farmers providing tools for measuring environmental variables and automated consulting based on artificial intelligence.

### Precipitation, temperature and soil moisture measurements



#### What can it measure?

Soil temperature and humidity, ground air temperature, dew or rainfall.

#### What can it be used for?

1) Soil moisture at various depths is important to agronomists for evaluating plant germination and growth, and for applying fertilizers and other sprays to maximize their effectiveness.

- 2) Detection of ground frost.
- 3) Precipitation and dew detection.
- 4) Long-term drought monitoring.
- 5) Wide range of use in the field, vineyard, orchard, garden, etc.

### Long-term weather monitoring

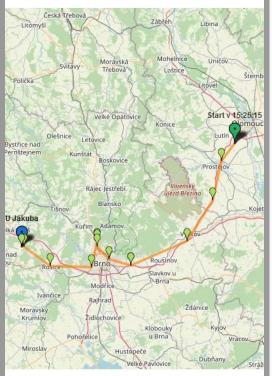


Long-term monitoring of the weather in a given location provides valuable data for agronomists decision-making, but also, along with other measured variables, data for neural networks and artificial intelligence.

This data from long-term measurements will enable expert advice based on artificial intelligence.

What we can measure: air temperature, atmospheric pressure, humidity, sensible temperature, dew point, precipitation, wind direction and speed, wind speed in gusts.

# GPS monitoring of machines and equipment



# An important tool for anyone who wants to manage and optimize farm operations.

#### What can it be used for?

1) Tracking the movement of agricultural equipment and vehicles,

2) accurate monitoring of the location of trailers, shipping containers, expensive equipment, rented equipment,

3) long-term monitoring of machinery utilization and location,

- 4) records of company mobile equipment,
- 5) helps to track down stolen equipment,

6) and many more.



# ApiVčelař 4.0

A comprehensive expert system for beekeepers providing colony monitoring tools and automated AI-based advice.

## Measuring the condition of bee colonies



Our system allows remote monitoring of bee colonies.

We monitor the hive weight, temperature and humidity. We analyse the bees' sounds.

#### What can the system be used for:

Long-term monitoring of bees, recording of breeding interventions, monitoring of honey growth, swarming prediction, recording of feeding, increasing yields, increasing labour productivity.

# Protection against thieves (GPS)

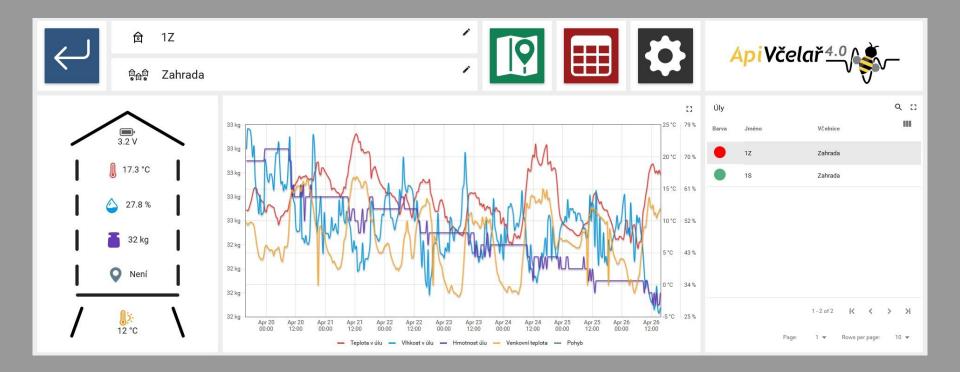


Our device can not only measure physical quantities in the hive or listen to the bees' voice, but also report its location.

When someone starts to move the hive, it starts to send coordinates more frequently.

This is a valuable basis for police intervention and return of your hives.

# Portal ApiVčelař 4.0





# Please contact us:

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Thank you for your attention