

# We take a different look at your soil!

For more than 20 years, we stand for a holistic  
consideration of soil fertility.

We offer standardized soil analyses in our own  
laboratory, comprehensive consulting as well as  
workshops, education and training.



**Climate change – Sustainability – Agricultural practice**



## Bringing nature into the laboratory

Climate change, economic pressures as well as regulatory requirements are the main challenges farmers face.

**Innovative solutions and future-oriented concepts for soil management are in high demand!**

With our pedological know-how, our state-of-the-art laboratory and the method of Fractionated Analysis, we support you ideally on your way towards a successful concept.

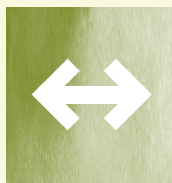
## The Fractionated Analysis

Developed by the Austrian soil scientist Professor Husz, the analysis depicts the complexity of soil fertility via the determination of 120 individual parameters.

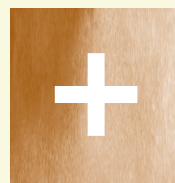
**Nutrients** and **potential pollutants** are measured in their different availabilities (= **fractions**): water-soluble, exchangeable and reserve fraction.



Fraktion I  
***Water-soluble***



Fraktion II  
***Exchangeable***



Fraktion III  
***Reserve***

As a result, **nutrient ratios** and potentially mobilizable **reserve substances** can be detected. We are constantly refining the method by integrating current findings of soil research and requirements from agricultural practice!



## Expertise and high-end Analytics

In **our laboratory**, soil samples are examined according to the standardized method of Fractionated Analysis. State-of-the-art technology and highly qualified employees guarantee precise results and **quick processing in 2 to 3 weeks!**

### You receive answers to the following questions:

- + **What is the current nutrient supply?** Are the nutrients in balance? Can they be mobilized or is there a need for fertilization?
- + **In which acid buffer system is the soil currently located?** Is there a need for liming? Which amount and composition of products is recommended?
- + **What is the humus content and its quality?** What are the environmental conditions for soil organisms?
- + **Is the soil prepared for climate change?** Is the soil fertility ensured in a sustainable manner? Is the potential of the site being used efficiently?
- + **Are the soil functions (e.g., biological habitat, flood protection) fulfilled?**
- + **Does the soil bear a hazardous potential?** (e.g., potentially toxic substances)

**Each sample is treated and evaluated individually in order to derive site- and farm-specific measures.**

# Analytical Programs

## Initial Sampling

*Validity: 5-10 years*

Basic Characterization with all parameters and fractions to assess soil fertility (including 5 phosphorus pools)

### Range of parameters & Report:

**Basic parameters:** KH-value (soil texture), coloration, turbidity,  $pH_{H_2O}$ ,  $pH_{KCl}$ , electrical conductivity, lime content, organic matter (%), C/N, C/P, C/S), potential und actual cation exchange capacity.

**Fractions:** water-soluble + exchangeable + reserve substances (nutrients/trace elements, potentially toxic substances), including 5 phosphorus-pools.

**Detailed explanatory report** with graphical representation, information on melioration and plant nutrition.

**365 €**

## Resampling

*3 to 5 years after Initial Sampling  
to monitor and review changes*

### Option A

#### Comparison of soil properties and plant nutrition

Basic parameters and fractions as for Initial Sampling, comparative short report

**275 €**

### Option B

#### Comparison of soil properties

Basic parameters as for Initial Sampling (without C/P), overview sheet of soil properties

**190 €**

If you have any questions, we are here to support you! We are happy to consult you via phone, e-mail and, if required, also on site.

**This service is included in the price!**



## Education and Training

We love to share our know-how and passion for soils! We are happy to convey soil science content and relationships between soil fertility and plant nutrition in an easy and understandable manner.

Topics are elaborated in **theory and practice** interactively, soil profiles are discussed, and various parameters are derived on the basis of field testing methods.

***Are you interested in an event? Contact us!***

LECTURES

SEMINARS

TRAINEESHIPS

FIELD DAYS

ONLINE EVENTS



## Experience soil in 3D

Digitally enter a soil profile. For example, for educational purposes or to highlight the terroir of your vineyard?

We create digital 3D profiles! This spectacular technology offers high-resolution insights into the soil, which are supplemented by chemical-physical analysis data.

***Examples: [www.bodenoekologie.com](http://www.bodenoekologie.com)***





## Hans Unterfrauner

**For more than 20 years**, the landscape ecologist (graduated from the University of Natural Resources and Life Sciences, Vienna) has followed his vocation to understand the complex matter of soil.

**His work focuses on agricultural soil science**, the recording and evaluation of soil fertility and the identification of solutions for practice.

**In more than 70 seminars** and practical workshops every year, Hans passionately conveys his know-how and thus bridges the gap between science and practice.

**With his team of specialists**, he supervises international research and practical projects on behalf of municipalities and agricultural enterprises of all sizes.

### You have any questions?

We look forward to hearing from you! [office@bodenokologie.com](mailto:office@bodenokologie.com)

Start your soil analysis:  
[www.bodenokologie.com](http://www.bodenokologie.com)

**TB Unterfrauner GmbH** Umseerstraße 39, 3040 Tausenblum, Österreich