

SOIL FERTILITY + CLIMATE CHANGE

with HANS UNTERFAUNER

+40 Growing Days
1,5-4°C

WORKSHOP

CLIMATE CHANGE

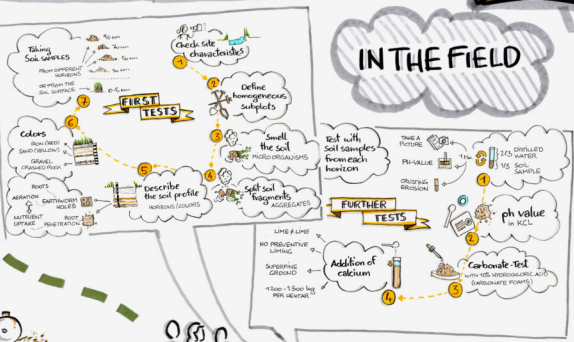
- Grassland farming
- Forestry
- Fruit Production
- Viticulture
- 2 main crop
- Pest insects
- Drought periods

"Soils are not surfaces, soils are bodies!"

A healthy and fertile soil is ...



IN THE FIELD



ANALYSIS

- VOLUMENANALYSE
- LK
- Pottman
- Balzer
- BLG
- Kinsey
- Fractionated Analysis
- Ewo Analysis

Water deficiency reduce photosynthesis



Catch crop



Humus-Formation

1% Humus = 15mm Water-Storage
Earthworm holes
20-30 years

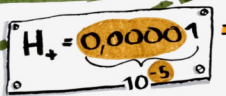
Not used
Soil FERTILITY

Crusting

Acidification

Over-fertilization

- Fertiliser
- Root exudates
- Microorganisms
- Precipitation



ph=5

Soil respiration
30% CO₂ uptake results from soil respiration

1 HEKTAR
30cm depth

VOLUME 3.000m³

PORE VOLUME 1.000m³

WEIGHT 4.500t

Nutrient
PHOSPHOR 2.500kg
Potassium 750kg
Humus 90t

"Water must remain/be stored in the region!"

HYDROLOGICAL CYCLE

43°C
Humus loses water store capacity

SOIL SAMPLING



BODEN

Seminar
Hans Unterfauner

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