

Basic Characterization

Is it necessary to buy fertilizer or are there enough mobilizable reserve substances in the soil? Why is the corn not growing or not growing as well as on comparable sites? The Basic Characterization analyses the current nutrient supply and additionally the reserve substances and 5 phosphorus pools. With this survey program fertilizers can be saved and growth problems can be solved.

You receive the following information:

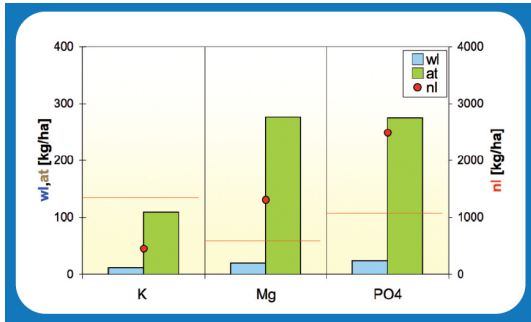


Figure: Fractions of K, Mg, P.

- Is the soil reacting acidly neutrally or alkaline?
- How is the current nutrient supply of the soil?
- Which nutrients in which concentration are stored in the reserve pool of the soil?
- How much phosphorus is stored in the different P-pools?
- How can nutrients be mobilized (become plant available)?
- Which fertilizers are not necessary and can be saved?

Range of Parameters:

Basic Parameters:

Soil Texture (KH), Coloration, Turbidity, pH_{Water} , pH_{KCl} , Electrical Conductivity (eC), Lime Content, C_{org} (=Soil organic Matter), organic Nitrogen, org. Phosphorus, org. Sulphur, Cation Exchange Capacity (CEC_{actual} , $CEC_{potential}$).

Elements in the Water Extract:

Ca, Mg, K, Na, NH_4-N , NO_3-N , Al, Ba, P, Si, SO_4 , Cl, Fe, Mn, Cu, Zn, Co, Mo, B, As, Ni, Cr, Pb, Cd, Ti, V.

Elements in the Exchanger Extract:

Ca, Mg, K, Na, NH_4-N , Al, Ba, P, Si, Fe, Mn, Cu, Zn, Co, Mo, B, As, Ni, Cr, Pb, Cd, Ti, V.

Elements in the Reserve Fraction:

Ca, Mg, K, Na, Al, Ba, P, Si, Fe, Mn, Cu, Zn, Co, Mo, B, As, Ni, Cr, Pb, Cd, Ti, V.

5 Phosphorus Pools:

Water-soluble, exchangeable, acid-soluble and organic Phosphorus as well as total contents.

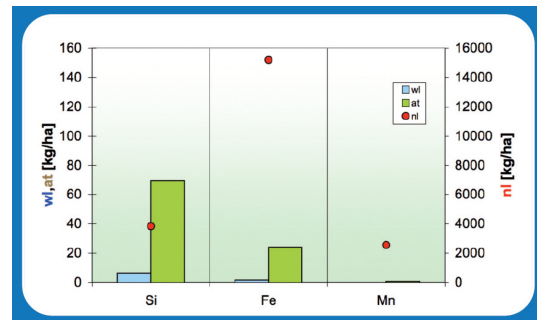


Figure: Fractions of Si, Fe, Mn.

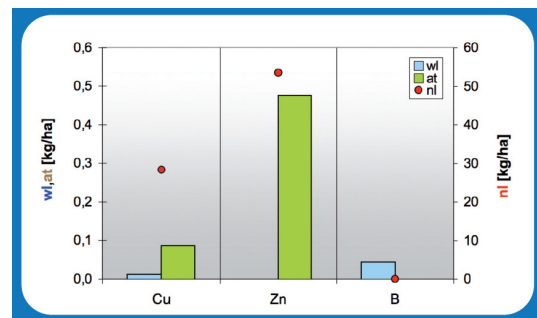


Figure: Fractions of Cu, Zn, B.