



Insight in greenhouse soil and fertilization

To achieve the best yield and quality, a crop needs sufficient nutrients. The crop absorbs nutrients from the substrate in which it grows. In case of soil grown crops, it is important to have insight in the nutrient supply of the soil and the nutrient absorption by the crop. Eurofins Agro analyses provide such insight.

Nutrients in greenhouse soil can be freely available or they can be bound to soil particles. The ratio between organic matter and clay particles determines how heavily the elements are bound to the soil particles. The Cation Exchange Capacity (CEC) is decisive in this respect.

The fertility of greenhouse soil is not just a matter of the minerals present and their availability. The amount of organic matter, acidity (pH), water holding capacity (pF) and soil life are also important.

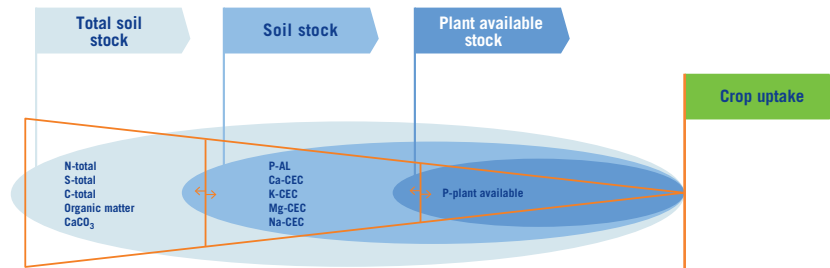
Plant nutrition

All elements need to be present sufficiently to ensure an optimal growth and development of the crop. Plants mainly absorb minerals via the roots. The level of absorption via the leaves is minimal. Fertilization must be adapted to this principle.

The minerals a plant need, can be divided into two groups: macronutrients and micronutrients. The macronutrients are nitrogen (N), phosphate (P), potassium (K), sulphur (S), calcium (Ca) and magnesium (Mg). The microelements, or trace elements, are iron (Fe), silicon (Si), manganese (Mn), zinc (Zn), molybdenum (Mo) and copper (Cu).

FERTILIZATION ANALYSIS

Greenhouse soil



WHEN	PORTFOLIO		WHY
 Before cultivation	Greenhouse SoilStock		STOCK BASED RECOMMENDATION
 Before planting		Greenhouse SoilCheck	START OF SEASON RECOMMENDATION
 During cultivation		Greenhouse SoilCheck	CropCheck
 During cultivation		Greenhouse SoilCheck	PlantsapCheck

Eurofins Agro's fertilization analyses provide information about availability of nutrients in and the condition of greenhouse soil and nutrient uptake by the crop. Four different types of analyses are available. A combination of these analyses shows the full picture.

Greenhouse SoilStock

This analysis gives information about the soil supply of nutrients. The report shows the total quantity of macronutrients and micronutrients, pH value, pF curve and soil structure parameters. The total quantity of soil life is also part of this analysis. The Greenhouse SoilStock analysis provides insight in the need for remedial fertilisation, including liming, prior to cultivation.

Greenhouse SoilCheck

This analysis indicates nutrients in greenhouse soil which are directly available for uptake by the crop. When Greenhouse SoilStock analysis is combined with this analysis, its results are included in the calculation for Greenhouse SoilCheck. Greenhouse SoilCheck has a quick

turnaround time and should be applied immediately before planting and during cultivation. This analysis optimizes additional fertilization with the right fertilizers.

CropCheck

This analysis provides information about the nutrients absorbed and stored by the crop. Nutrients are analysed in dry matter and it therefore provides insight in the actual uptake by the crop. CropCheck enables you to improve your fertilisation strategy during cultivation with a (foliar) fertilizer application.

PlantsapCheck

This analysis provides information about the nutrients in the plant sap. Some of the nutrients in the sap can be transported to other parts of the plant. This analysis is a snapshot and provides insight into the crop's condition during cultivation. How well are nutrients being absorbed and does the climate support uptake? With PlantsapCheck you can take the right measures in terms of fertilization or climate control.