



Nutrients

Nitrogen

Required for the growth of leaves and stems

Deficiency causes weak, stunted growth and yellowing of older leaves.

Excess nitrogen can also be detrimental causing such effects as disproportionate leaf growth at the expense of other parts of the plant (e.g. flowers)

Phosphorous

Principle nutrient for root growth and development

Deficiencies may cause stunted root systems whilst the leaves on some plants may also exhibit a dull green or purple coloration

Potassium

Essential for growth and water and nutrient transportation

Deficiency in plants include brown scorching and curling of leaf tips as well as chlorosis (yellowing) between leaf veins. Purple spots may also appear on the leaf undersides. Plant growth, root development, and seed and fruit development are usually reduced in potassium-deficient plants.

Magnesium

A constituent of chlorophyll, the green pigment which enables plants to photosynthesise

Deficiency may be noted by the interveinal yellowing of the plant's older leaves.

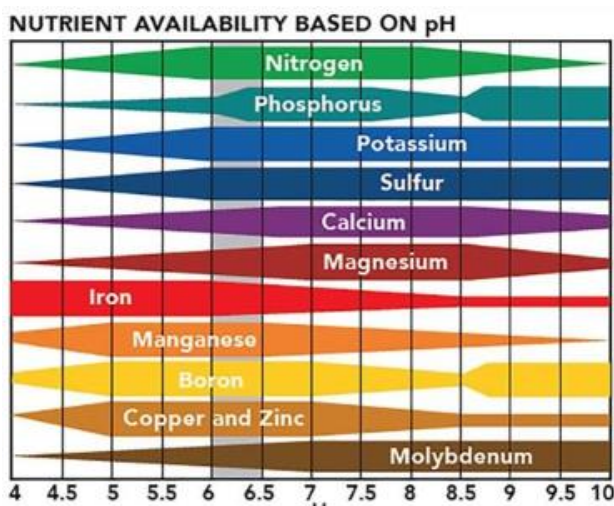


Soil pH & Conductivity

Soil pH

The pH value of a soil indicates the degree to which it is either acid or alkaline. pH is measured on a scale from 0-14 where pH 7.0 is neutral. Where the soil is acid, values are less than 7.0 whilst if the pH is above 7.0 it is alkaline.

The pH of a soil can impact on the availability of nutrients and potentially toxic elements to plants



Electrical Conductivity

The electrical conductivity value is a general measure of the soluble salt content or salinity of a soil. Units of electrical conductivity are measured in Siemens (S) or micro Siemens (μ S) per centimetre.

Excess of soluble salts can adversely affect plant life by causing premature wilting, scorching and by affecting the ability of a plant to take up nutrients and water. A high soil salinity may be derived from excessive nutrient applications, an over application of 'rich' organic additives or from building waste within a soil.