

MINERAL CONTENT EXPLAINED

(N) Nitrogen - Stikstof:

Nitrogen is very important and needed for plant growth, it is found in healthy soil and gives your plants the energy they need to grow and produce, nitrogen forms part of the Chlorophyll molecule, and is involved in creating food for plants through photosynthesis.

Nitrogen is excellent and needed for any grass, plants, trees, fruits or vegetables, but there are certain fruits and vegetables that benefit from extra nitrogen and respond exceptionally well, these include the following: Tomatoes, peppers, greens, sweet corn, pole beans, musk melons, cucumbers, squash, okra.

(P) Phosphorus - Fosfor:

This is a vital component of ATP, the energy unit of plants and grass, ATP forms during photosynthesis, has phosphorus in its structure and processes from the beginning of seedling growth through to the formation of grain and maturity, thus its essential for the general health and vigour of all plants and grass types.

The following can draw extra benefit from Phosphorus, plants and grass that grow in cold weather, and which has limited roots and rapid top growth, such as grass, lettuce and legumes.

(K) Potassium - Kalium:

Potassium is associated with the movement of water, nutrients and carbohydrates in plant tissue, its involved with enzyme activation within the plant, which affects protein, starch, and ATP production, the ATP production regulates the rate of photosynthesis.

The following benefits from extra potassium, bushes and trees that produce edible fruits and vegetables, citrus, tomatoes and summer and winter squash.

Lignin - Lignien:

Lignin is a class of complex organic polymers that form key structural materials in the support tissues of most plants. Lignins are particularly important in the formation of cell walls, especially in wood and bark, because they lend rigidity and do not rot easily. Chemically, lignins are polymers made by cross-linking phenolic precursors.

(CA) Calcium - Kalsium:

Calcium is an essential nutrient for plants, grass and soil, it helps with cell wall integrity and maintains the soils Ph structure, this is a very important nutrient as pests and disease can easily wreck a lawn, plant, or soil without the correct structure.

The following can draw extra benefits from Calcium, Lawns, Parks, Golf Courses, plants like; tomatoes, peppers, broccoli, cauliflower, Swiss chard and spinach, extra calcium prevents blossom end rot.

(MG) Magnesium - Magnesium:

Magnesium is actually the powerhouse behind photosynthesis in plants, without magnesium, Chlorophyll cannot capture sun energy needed for photosynthesis, so in short magnesium is required to give leaves, lawns and trees their green colour, magnesium in plants and grass is located in the enzymes, in the heart of the chlorophyll molecule, this is also where your nitrogen plays a part as it forms part of the Chlorophyll molecule.

This is a vital element for grass and plant life, it's one of thirteen mineral nutrients in soil and when dissolved in water is absorbed through the roots of plants or grass, making our product stand out from the rest as it is in liquid form and can be easily absorbed for faster results, and quicker response times.

(NA) Sodium - Natrium:

Sodium aids in metabolism and synthesis of Chlorophyll, it is not essential for plants, but it is a great way to balance your soil and concentrate carbon dioxide.

(S) Sulphur - Swael:

Sulphur is an essential element in forming proteins, enzymes, vitamins, and chlorophyll in plants and grass, its crucial in nodule development and efficient nitrogen fixation in legumes, it contributes to crop winter hardiness, it helps your plants resistance to disease, aids in growth and also in seed formation, hence every plant form, grass type, soil type or lawn will benefit from it.

(FE) Iron – Yster:

Iron is an essential micronutrient for every plant and living organism, it plays a critical role in metabolic processes such as DNA synthesis of chlorophyll and is essential for the maintenance of chloroplast structure and function.

The following can draw extra benefit from iron; turnips, tomatoes, squash, radishes, sweet potatoes.

(MN) Manganese - Mangaan:

Manganese is an important micronutrient for plant growth and development and sustains metabolic roles within different plant cell compartments.

The following can draw extra benefit from manganese; soybeans, wheat, barley, oats.

(CU) Copper - Koper:

Copper activates enzymes in plants which are involved in lignin synthesis and is essential in several enzyme systems, it is also required in the process of photosynthesis, is essential in plant and grass respiration and assists in metabolism of carbohydrates and proteins, copper also serves to intensify colour and flavours in flowers, grass, fruits and vegetables.

The following can draw extra benefit from copper; greenhouses, grass, gardens, roses, fruits and vegetables.

(ZN) Zinc - Sink:

Zinc is important to help the plant produce chlorophyll, and some carbohydrates, leaves discolour when the soil is deficient in zinc and plant growth is stunted, conversion of starches to sugars and its presence in plant tissue helps the plant withstand cold temperatures, its essential to produce auxins, which helps with growth regulation and stem elongation.

The following can draw extra benefit from Zinc, corn, sweet corn, edible beans.

(MO) Molybdenum - Molibdeen:

Molybdenum is an essential component in two enzymes that convert nitrate into nitrite (another form of nitrogen) and then into ammonia before it is used to synthesize amino acids within the plant, it is also needed by symbiotic nitrogen fixing bacteria in legumes to fix atmospheric nitrogen.

The following can draw extra benefit from Molybdenum, lettuce, tomatoes, cabbage, cauliflower, duckweed, grapes, citrus.

(B) Boron - Boor:

Boron is used with calcium in cell wall synthesis and is essential for cell division (creating new plant cells) boron requirements are much higher for reproductive growth, so it helps with pollination, and fruit and seed development.

The following can draw extra benefit from boron; turnips, broccoli, cauliflower, cabbage, Brussel sprouts, apples, pears and grapes.

(NI) Nickel - Nickle:

Nickel is a plant micronutrient it contributes to nitrogen fixation and the metabolism of urea; it is important for seed germination; nickel is also important for bacteria and fungi which are both important for good plant growth.

The following can draw extra benefit from Nickel, beans, alfalfa, pecans, plum, peaches, citrus, barley, wheat, wetland plants.

(CD) Cadmium - Kadmium:

Cadmium inhibits the photosynthesis rate and production of chlorophyll and its activity, it also changes chloroplast structure and function, stomatal opening, transpiration, and antioxidant production, these effects in turn, reduce water and nutrient uptake by plants and grass.

The following can draw extra benefit from Cadmium, tomatoes, barley, spinach, peas.

(CR) Chromium - Chroom:

Chromium affects several processes in plants, namely seed germination, growth, yield, and also physiological processes as photosynthesis impairment and nutrient and oxidative imbalances. It has been shown that CR is able to induce genotoxicity in several plant species.

The following can draw extra benefit from Chromium; broccoli, green beans, potatoes, apples, bananas, whole grains, peas, corn, grapes, sweet potatoes.

(AS) Arsenic - Arseen:

Arsenic exposure generally induces the production of reactive oxygen species that can lead to the production of antioxidant metabolites and numerous enzymes involved in antioxidant defence, our arsenic levels are low enough to not pose a toxic risk to plants or humans, and high enough to be beneficial for plants and grass.

The following can benefit from arsenic; leafy vegetables, greens, root vegetables like carrots, beets and radishes, as they carry arsenic in their skins.



(PB) Lead - Lood:

Lead strongly inhibits seed germination, root and plant growth, seedling development, transpiration and chlorophyll production.

The following can benefit from lead; leafy greens, lettuce, silver beet, carrots, potatoes, onion and garlic.

(SE) Selenium - Selenium:

Plants absorb Selenium mainly in the form of selenate using high affinity root sulphate transporters, selenium has been reported to mitigate stress in plants because of its capacity to induce the synthesis of nitrogen compounds, in addition to stimulating the activity of antioxidant enzymes and metabolites.

The following can benefit from Selenium; cabbage, broccoli and cauliflower.

(PH) Ph - Ph:

A PH of 7 indicates a neutral soil, the PH is important because it influences the availability of essential nutrients. Most horticultural crops will grow satisfactorily in soils having a PH between 6 and 7.5.

Calculated Carbon – Berekende koolstof:

Plants use carbon dioxide during photosynthesis, the process whereby the plant converts the energy from the sun into a chemical carbohydrate molecule, plants use this carbon chemical to grow, all plants and grass types benefit greatly from Carbon.

(CN) Calcium nitrate - Kalsium nitraat:

Calcium nitrate helps with cell formation, but it also neutralizes acids to detoxify plants, the nitrogen component is also responsible for fuelling protein production and essentially leafy growth, heat and moisture stress can cause calcium deficiencies in certain crops, like tomatoes.

The following can benefit from Calcium Nitrate: tomatoes, apples, and peppers.

