

Nutrient World

Learn all about The N, P, K Gang
and what they do!

Minerals





Mineral Notes

- Minerals are formed naturally in the Earth.
- Soil contains both primary and secondary minerals.
 - Primary minerals haven't changed since they formed, tend to be irregular in shape, and are usually found in sand and silt.
 - Secondary minerals are formed when primary minerals are weathered (broken down over time), are much smaller in size, and are found in silt or clay.

Image courtesy of 123RF.com



Mineral Notes

- Nutrients in soil can come from the breakdown of secondary minerals.
 - There are primary and secondary nutrients.
- The three most important (primary) nutrients in soil are nitrogen (N), phosphorus (P), and potassium (K).
- Some (secondary) nutrients are calcium (C), magnesium (M), iron (I) and sulphur (S).
- You'll notice that there is a letter after each nutrient. These are called symbols and give scientists an easy way to list each one on a table called The Periodic Table of Elements.
- Potassium has the symbol (K). Hmmm...Why isn't it (P)?
- You guessed it! (P) was already used for phosphorus.

Image courtesy of 123RF.com

Knowing NPK: Your Soil, Made Better



Nitrogen



Phosphorus



Potassium



Nitrogen (N) is often called the Builder. It helps plants stay green by building strong stems and healthy green leaves. Nitrogen helps the plants we eat become good for us by adding proteins we need to grow and be strong.

Nitrogen

is responsible for growth of leaves and greenness of a plant.

NITROGEN = AIR

Nitrogen is the world's most common fertilizer and the nutrient that makes up 16% of the protein in our bodies — comes from the air; 78% of the air we breathe is nitrogen.



Phosphorus (P) is referred to as the Enforcer. It helps the plant trap and use the sun's energy to make food through photosynthesis (making food/energy from the sun). Plants also need Phosphorus to grow healthy root systems.



Phosphorus

encourages strong roots, fruiting, and flower development.

Phosphorus glows in the dark and in moist air. It got its name from being “light bearing.”



Potassium (K) is often called the Protector. Potassium protects our plants against diseases and helps them stay healthy when it is cold or dry. It also helps plants move nutrients and water in the plant to where it's needed most.



Potassium

helps the general health and hardiness of a plant. It typically promotes growth and larger fruits.

Potassium, the same mineral we get from bananas, is an edible salt mined from evaporated oceans.