

NITROGEN

BIG, GREEN & STRONG

DYK: Nitrogen (N) is an important building block for all plant parts –roots, shoots, leaves, stems, fruit buds, etc. Nitrogen promotes rapid growth, enhances nutrient uptake, keeps plants green, and healthy and is responsible for building plant protein. **(gives the plant it's muscles)!**



what if there is not enough N?!?

A lack of nitrogen limits the growth and strength of plants and the older leaves will turn yellow (chlorosis)!



where do plants get N from?!?

DYK the air is nearly 80% Nitrogen?? However, Nitrogen gas in the air cannot be used directly by plants. First, it must be combined with other elements such as hydrogen or oxygen under heat and pressure before plants can use it. Have you heard of the Haber-Bosch process? This is how Nitrogen fertilizer is made! Check out the really cool N production video to learn more!



microbes play a part!!

When plants and animals die, they are decomposed in the soil by microbes. This microbial decomposition process releases Nitrogen from the organic matter in a form that plants can use such as ammonium, or after further microbial action, as nitrate!

The N reader tells you all about this and more!

AND then there are really cool plants called LEGUMES...

Plants of the legume family, which include peas, beans, alfalfa, peanuts, and soybeans, are AGMAZING! They can convert Nitrogen gas to a usable form all by themselves! They have a close relationship with bacteria that live in their roots. The bacteria use sugars from the plant for energy to take nitrogen from the air and convert it into a form that the plant can use! Legume roots form "nodules" or little balls to make N for the plant!

REALLY GREAT RESOURCES:



N READER.



N VIDEO.



N GAME.



N CYCLE.



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