

penenergetic



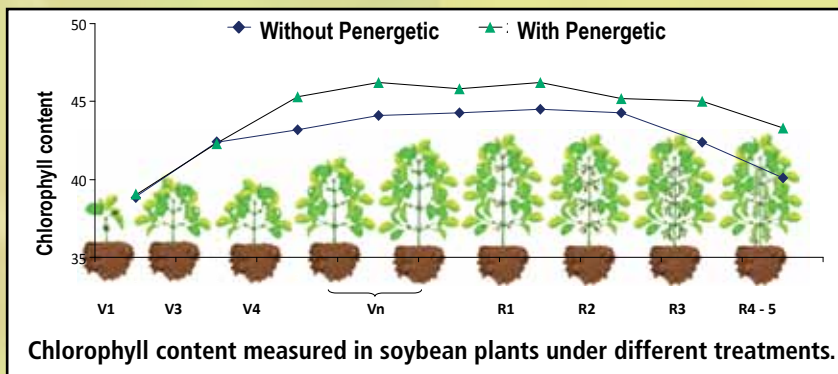
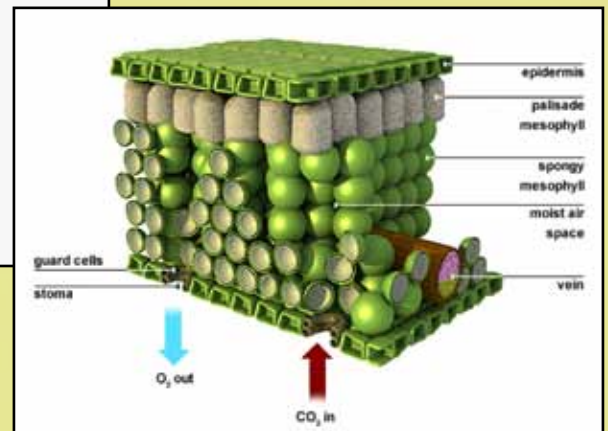
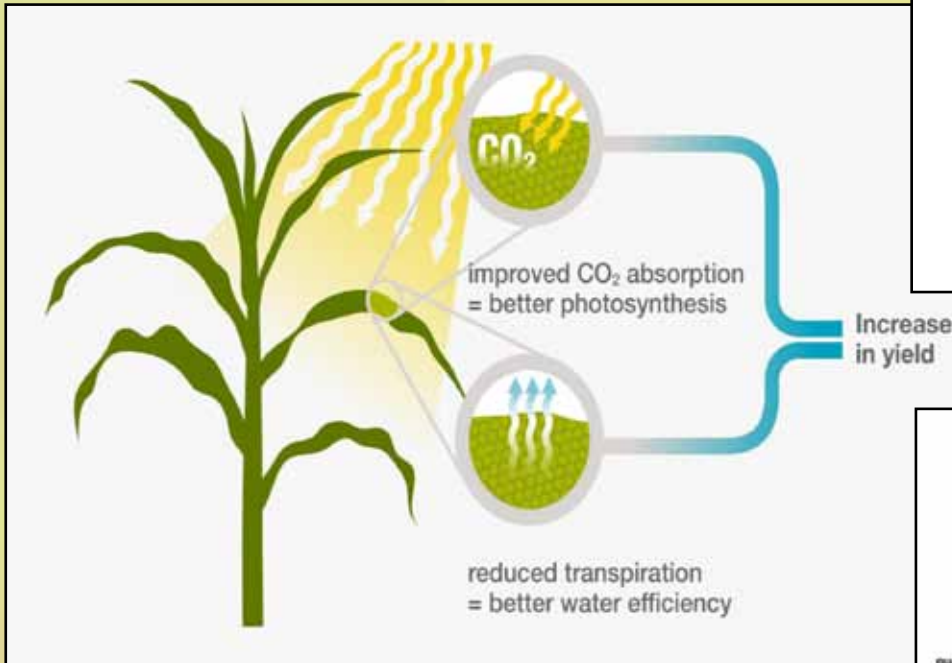
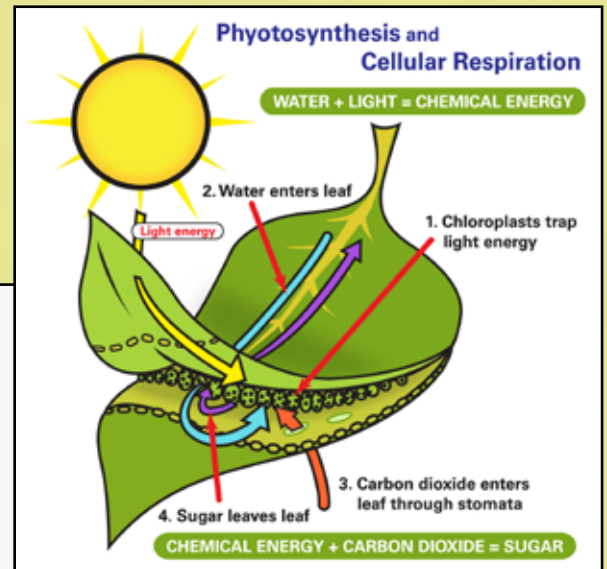
the natural biotechnology

BOOST CROP PRODUCTIVITY



penergetic

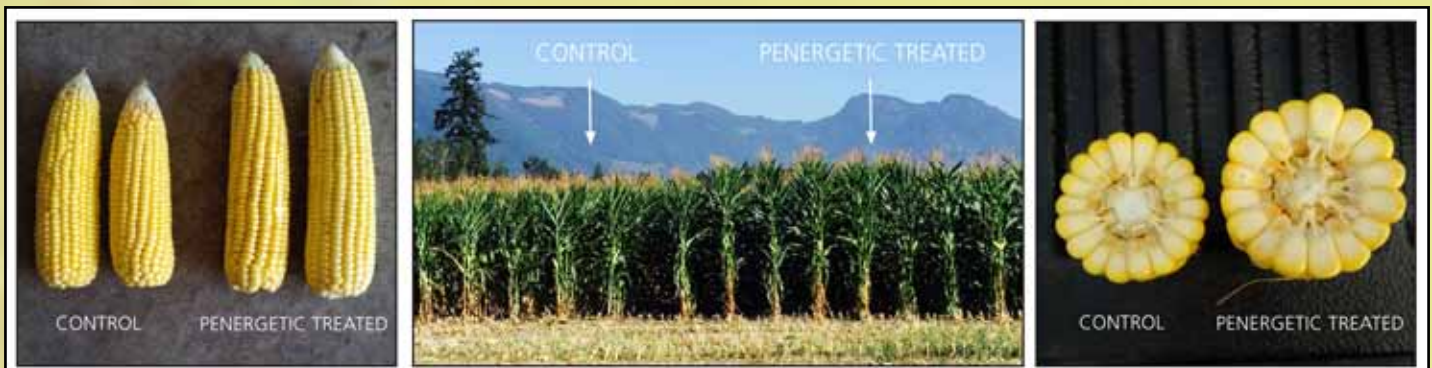
FOR PLANTS



Penergetic p (for plants) applied on plants promotes better chlorophyll production and an increase in the photosynthesis process.

There is a very close relationship between the increase in the photosynthesis process and an increase in a plant's leaf area and the exudation of the biochemical signals in the roots, that will influence the symbiosis between: fungal endophytic, bacterial endophytic, rhizobium associates and mycorrhizal development.

[Using the companion product, penergetic b (for soil), accelerates micro bioactivation in the soil, which complements the photosynthetic process by increasing basal soil respiration (CO_2 emissions) so available for use by plants (the crop).]

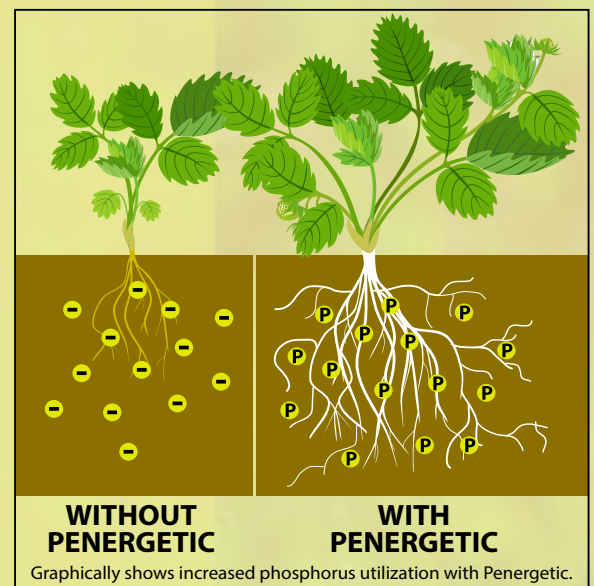
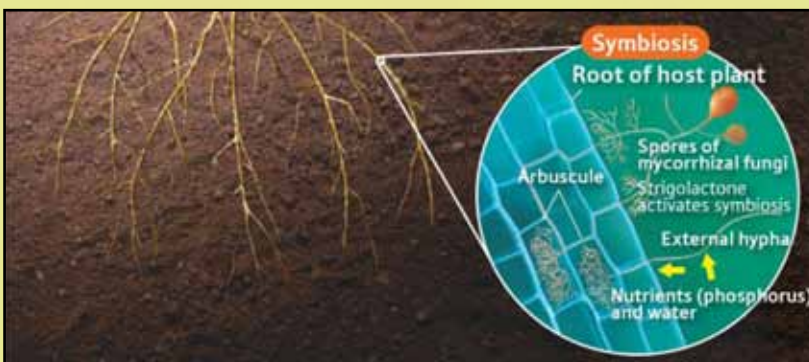
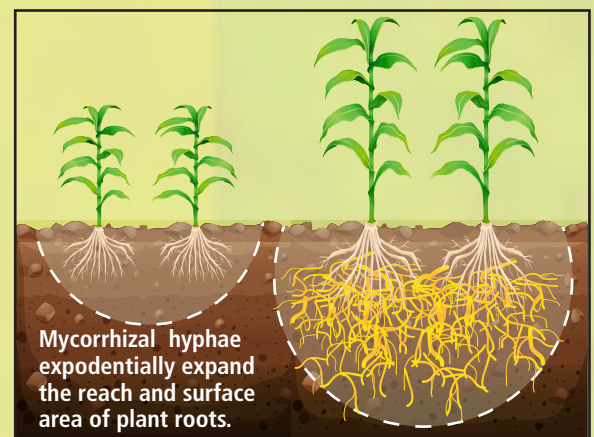


CROP BIOACTIVATION

penergetic p (for plants)

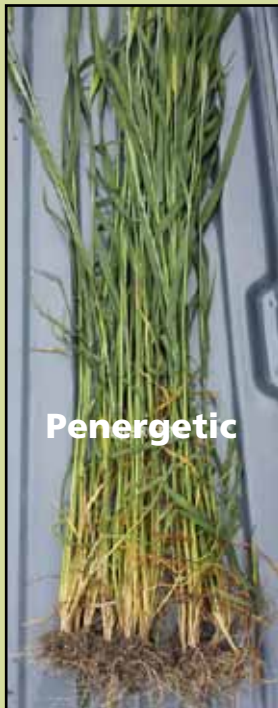
- Increases chlorophyll and photosynthesis activity
- Optimizes leaf growth (nutrient assimilation)
- Improves nutrient (sap) flow in plants
- Increases mycorrhizal fungi and rhizobia
- Elevates Brix (energy) level in plants
- Strengthens plants and increases resistance
- Lowers susceptibility to pest and disease
- Promotes better root formation = stronger plants
- Use as seed treatment = improved germination

Penergetic p (for plants) can increase the number of mycorrhizal fungi by between 120% – 156% (STEFFEN, 2014, EPAMIG, 2011), suggesting that using the Penergetic technology can facilitate an important synergy between plants & the population of beneficial micro-organisms in the soil (SOUZA, J.A., 2011)



Plants take up most mineral nutrients through the rhizosphere where micro-organisms interact with plant products in root exudates. For instance: mycorrhizal fungi is responsible for 80% of phosphorus uptake by plant roots and can increase the volume of soil explored by plants by 5 to 700 times. It also increases plant absorption of nutrients with low mobility in soil (e.g. phosphorus) and makes plants more drought resistant. Rhizobiaceae bacteria, which form root nodules, enable plants to utilize atmospheric nitrogen.

Durum Wheat, Filmore, SK
Penergetic treated = extra 20 bu/ac



Penergetic



Control

Corn - the Penergetic Difference



Control



with Penergetic

Organic Mustard

Penergetic treated = extra 11.5 bu/ac (1.5% dock-



Penergetic

Control

Soybeans - under stress



Control

Improved Performance with Penergetic
 (yield more than double)



with Penergetic

Seed Treatment with penergetic p
 (onion sets after 15 days)



with penergetic p

Control

Seed Treatment Field Trial on Winter Wheat
 with penergetic b and p versus Control (no treatment)



with pen b & pen p

Control

with pen p (only)