

# penergetic



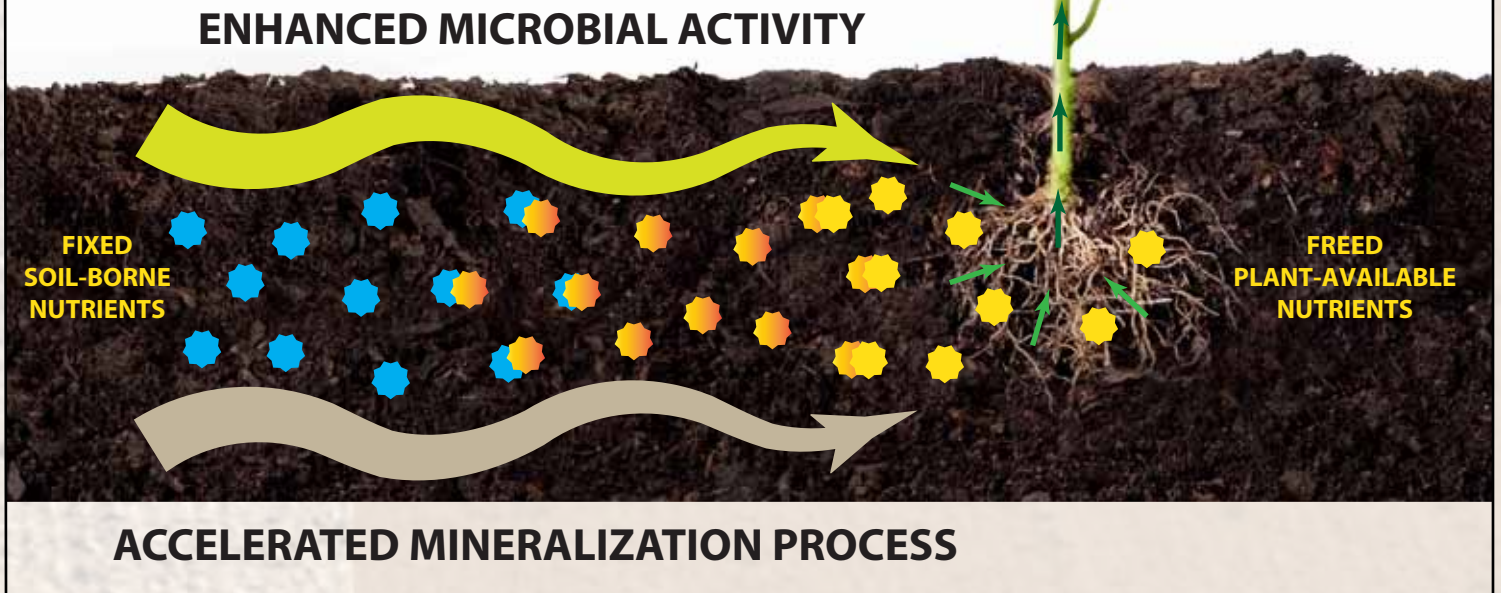
the natural biotechnology

# SOIL ACTIVATOR



# penergetic<sup>®</sup>

## FOR SOIL



### The effect of Penergetic k on *Trichoderma* sp. growth

-- 96 hours after inoculation --

0 g/L

1 g/L

2 g/L

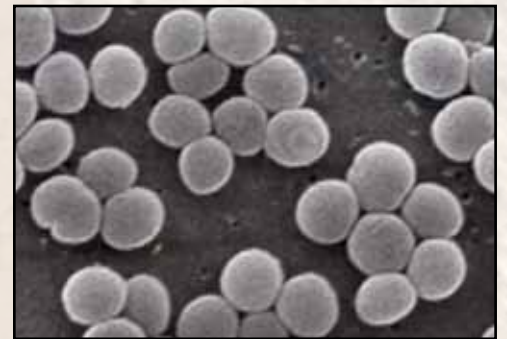


This experiment compares in vitro growth of *Trichoderma* sp. in a culture medium at varying concentrations of Penergetic K. (Gerusa Steffen and Joseila Maldaner). It illustrates a direct correlation between rates of Penergetic k use and *Trichoderma* fungi growth, thereby offering direct evidence of Penergetic k's positive influence in promoting increased microbial activity.

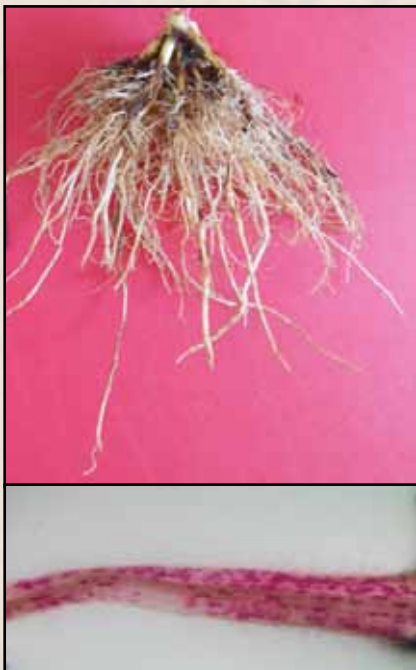
# SOIL BIOACTIVATION

## Penergetic k (for soil)

- Accelerates microbial activity
- Improves soil quality
- Activates crop residue decomposition
- Increases phosphorus availability
- Rehabilitates land not suitable for cultivation
- Reduces weed pressure
- Promotes soil macro & micro organisms
- Keeps soil warmer (Spring and Fall)
- Suppresses soil-borne plant pest (e.g. nematodes)
- Helps mitigate soil compaction
- Works synergistically with other agri-inputs
- Potential to reduce fertilizer requirements



### NEMATODES RESULTS



CONTROL

Penergetic<sup>®</sup>



**DIFFERENCE IN SOIL TEXTURE/QUALITY (SOIL BECOMES MELLOWER)**



**WITHOUT PENERGETIC K**  
(Soil is prismatic: heavy/chunky)



**WITH PENERGETIC K**  
(Soil is friable: loose/granular)

**CROP RESIDUE DIFFERENCE [EXAMPLE: LOW BUSH BLUEBERRIES]**



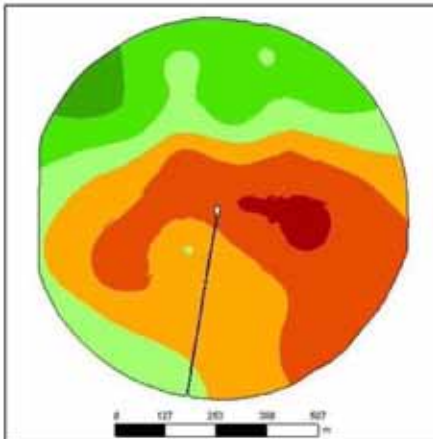
**CONTROL**  
(in Spring – no Pen k applied)



**WITH PENERGETIC K**  
(in Spring – after Pen k Fall applied)

**SOIL ANALYSIS - PHOSPHORUS**

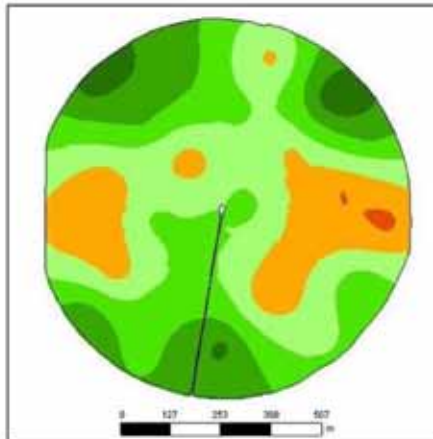
**Difference in Phosphorus Availability (2013 - 2015)**



**2013**

ppm	ha	%
28.02 - 30.00	2.04	2.68
30.00 - 40.00	21.73	28.52
40.00 - 50.00	23.21	30.47
50.00 - 60.00	13.33	17.49
60.00 - 70.00	13.77	18.07
70.00 - 76.94	2.10	2.76

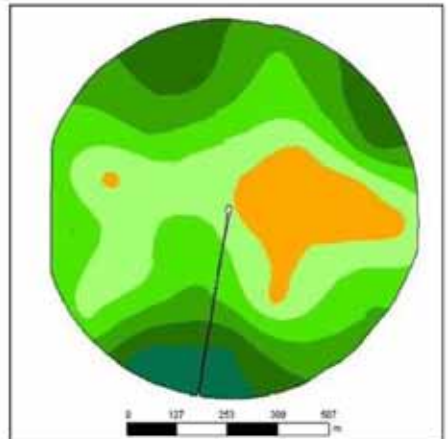
Min: 28.02 (ppm)  
Méd: 47.62 (ppm)  
Máx: 76.94 (ppm)



**2014**

ppm	ha	%
37.05 - 40.00	0.39	0.51
40.00 - 50.00	14.17	18.60
50.00 - 60.00	24.96	32.77
60.00 - 70.00	20.96	27.51
70.00 - 80.00	13.05	17.13
80.00 - 88.91	2.65	3.48

Min: 37.05 (ppm)  
Méd: 60.23 (ppm)  
Máx: 88.91 (ppm)



**2015**

ppm	ha	%
41.13 - 50.00	8.97	11.77
50.00 - 60.00	19.54	25.64
60.00 - 70.00	20.58	27.01
70.00 - 80.00	14.54	19.08
80.00 - 90.00	9.13	11.98
90.00 - 98.90	3.44	4.51

Min: 41.13 (ppm)  
Méd: 65.87 (ppm)  
Máx: 98.90 (ppm)

For further information contact:

**PENERGETIC CANADA**

1-888-737-0907

info@penergetic.ca

www.penergetic.ca