

# Root Stimulant or Inoculant?

In my quest to provide a healthy environment for the plants, shrubs, and trees I am planting, propagating, and nurturing, I've been reading about soil and soil life. It's totally fascinating! I know soil health was important but am continually amazed and awed by life and how it works.

We're getting ready to plant a number of shrubs so rather than apply a man-made chemical, I thought I'd apply some of my new found knowledge. I bought some endomycorrhizal root inoculant (something that produces immunity against disease) and compared it to Ferti-lome® Root Stimulator (something that increases the activity in a body). Here's what I learned.

Endomycorrhizal fungi are naturally-occurring fungi that invade the cell walls of the roots. It is essential for the health of 90% of all plants, shrubs, and trees and 100% of all grasses. It is not found in sedges. The fungi promote plant vigor; makes it more disease resistant; increases yields; improves the soil; and reduces the need to water and to fertilize. A 1.5 pound container costs \$44.00 and at  $\frac{1}{2}$ -1 tsp per shrub or tree, would treat 250 trees for 18¢ per tree.

Ferti-lome®'s active ingredient is Indole-3 butyric acid (IBA) at .0004% with inert items at 99.9996%. Never learned what was in the inert ingredients. IBA is a synthetic plant growth regulator. It is considered a biochemical pesticide similar in structure and function to the naturally-occurring growth hormone Indole-3 acetic acid. The risks to humans and the environment are negligible but it can be an eye irritant. It costs \$9.95 for a gallon and at 3.5 Tbsp per shrubs/tree, will treat 73 trees for about 14¢ per tree.

Of course, these numbers all change if one is planting vegetables or perennials. For about a 4¢ difference, I am applying only natural "ingredients" to my plants that are

extremely beneficial to the plant and the soil and have no safety risks. And, I'm not paying a penny for over 99% inert ingredients. I am spending less on watering, less on fertilizing, less on any of the "cides" (insecticide, pesticide, fungicide, herbicide), and getting more abundance from that plant. Sounds like that 4¢ difference is actually cheaper in the long run.

For a good "down and dirty" (HA!!) on soil, check out the book Teaming with Microbes by Jeff Lowenfels and Wayne Lewis

