It amazes me that over the past 20 years of my involvement with Below Ground Management and working with products that improve soil energy output, how many major farm magazine publications are finally catching on. I used to have to research for days to find new information whereas now I can open just about any farm publication and find not only an article but in some cases an entire issue devoted to ways we can improve our soils.

The dirt that we plant into, is a living ecosystem that requires attention just the same as our above ground crops require fertilizer, weed control and insect control. Many leading soil experts believe that the next major breakthrough in farming, 100 bushel soybeans and 300 bushel corn, will come from a greater emphasis on our soil and our Below Ground Management practices. Since everything that we apply to our soil must first go through a biological process to breakdown and become available to the plant, we at Pro-Soil agree and have the products, knowledge and understanding to assist you in improving your soil year after year.

THE TIME HAS COME TO QUIT TREATING OUR SOIL LIKE DIRT…
Our primary focus is on the Improvement of Soil Conditions, Quality of Crop and Increased Crop Yields. In addition to evaluating the above ground portion of your crops, we also focus heavily on the increase in root mass that occurs below the ground. Of the 90 individual ingredients in our products, there are 12 inputs that are specifically focused on root stimulation and root formation.

One major benefit to a larger and fuller root system is that plants are able to get to, and utilize more of, the nutrients and water needed to reach their genetic potential. Nutrient availability also reduces stress on the plants and leads to both yield and quality increases.

An equally significant benefit to increased root mass is the quantity of Organic Material being returned back to the soil in the form of roots. In September of this year, *Successful Farming Magazine* published the article, “6 Components of Soil Quality Management,” regarding the importance of Organic Matter. Some key points in the article include:

- “Soil Organic Matter makes up less than 6% of the soil, but it controls more than 90% of the soil’s function”
- “Organic Matter drives the organisms responsible for healthy soils while it also provides a reservoir of water and nutrients. This helps reduce compaction and increase water infiltration rate.”
- “As for CEC, Organic Matter can hold up to five times more nutrients for plants than can clay.”
- “Good things usually don’t come easy, and that’s the case with increased soil organic matter. You get it by adding crop residue- and more importantly Crop Roots – to the soil.”
- “The best way to add organic matter to the soil is to add MORE ROOTS.”
I am often asked in the field as to what soil types respond most favorably to Below Ground Management strategies. Keep in mind that we are working with Below Ground principles and improving soil energy output. We have seen excellent results in virtually all soil types. Let’s take a look at the physical properties that we are influencing with our high quality below ground products.

1. We are reducing compaction and relieving surface tension in the soil. (This improves pore space and percolation creating more oxygen in the soil)
2. We are increasing the stores of beneficial microbial activity. (This helps the soil in numerous ways but most importantly it creates more soil balance)
3. We are increasing the root mass on the plant. (This enables the plant to tap into more soil reserve nutrients and long term, a more active soil allows a higher percentage of the root mass to be converted to Organic Matter and humus)
4. We are accelerating residue decomposition. (This improves seedbed preparation and as stated above helps to speed up the process of nutrient conversion)
Pro-Soil launches H2Optimize

As many growers well know, hard water and water with high pH significantly hinder the results of herbicide effectiveness. This, in conjunction with many growers using mainly RoundUp (Glyphosphate) has created weed situations that are becoming increasingly more difficult to manage. Pro-Soil is proud to introduce **H2Optimize**, a combination of Bio-Technology, ammoniated ions, chelating agents and a powerful non-ionic surfactant to assist in improving herbicide effectiveness and creating a better environment for improved weed kill. Don’t forget to check with your local Pro-Soil representative this coming season as to how **H2Optimize** can benefit your management program.

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**2011 Crop Results**

- **Ohio**: Treated first year
- **Idaho**: 8-4-2011 9am Idaho
- **Utah**
- **Indiana**: