

## **Are There Benefits From Non-Traditional Products?**

Several non-traditional products are in the market-place that claim to improve crop production. In most cases, these products can be distinguished from fertilizers in that they contain few if any nutrients. Most traditional soil amendments and commercial fertilizers have been tested extensively through University research, documenting both their benefits and limitations. Unfortunately, we do not possess a similar database on many of the non-traditional products. We have received several grower inquiries recently regarding the use of humic acid, which we categorize as a non-traditional soil conditioner. Generally we think of soil conditioners as improving soil structure, and in turn, enhancing soil aeration and water holding capacity. Traditionally, the most common soil additives are crop residues, animal manures and composts. Most of these humic acid products are derived from oxidized lignite materials mined from North Dakota, Texas, New Mexico, and Idaho. This “coal-like” material is subjected to several chemical processes and humic acid is produced (humate is the dry form of humic acid). The final composition of the humic acid is about 55% carbon, 35% oxygen, 4% nitrogen, 1% sulfur, and 3% ash. So, the question is, “do these products provide any economic benefits?” University research conducted on various crops over the past 30 years has been unable to obtain an economic response from the products that have been tested. Results from these studies indicate that when applied at recommended rates the humate and humic acid products have provided no significant yield or quality improvements. Consequently, if you’re interested in using any of these humic acid products on your farm, it’s probably wise to initially evaluate them on a small acreage.