

Farmers: Avoid Pitfalls in your Soil Fertility Program This Season

Crop advisors set the record straight on five common fertilizer myths

LAKE FOREST, Ill. (April 30, 2004) – Rodney Heinen, founder of the successful agronomic consulting business, Oakhill Consulting, likens the soil to a jar of cookies. The Kansas-based crop advisor, who serves more than 800 customers nationwide, says in many parts of the country, nutrient reservoirs have been reduced to a crumb-like existence due to improper soil fertility practices.

“When there are no more cookies in the cookie jar, you’re not going to get a good crop yield,” Heinen says. In fact, of the 2.5 million soil samples in a North American summary update conducted by the Potash & Phosphate Institute (PPI) in 2001, 47% tested medium or lower in phosphorus (P) and 43% tested medium or lower in potassium (K).

“In light of these nationwide shortages, the current upswing in market conditions presents a unique window of opportunity for growers to replenish essential soil nutrients yet this year,” adds Dr. Paul Fixen, senior vice president, North American program director for PPI. “All too often, however, misconceptions about fertilizer applications result in missed yield opportunities.”

Understanding common “fertilizer fallacies” may help growers realize higher yields and profits:

Myth #1- *Fertilizer is an expense.*

Fact. A balanced fertility program is an investment. Few crop inputs pay greater dividends than fertilizers. Used efficiently, returns of \$3, \$4 or \$5 or more are possible for each dollar invested in fertilizer. At least one third, and up to two thirds, of a crop’s yield is attributed to the fertilizer alone.

Myth #2 – *It’s always OK to cut back on fertilizer for short-term savings.*

Fact. Only when P & K levels are in the high range does a grower have the flexibility to consider skipping applications (it is never a good idea to skip needed nitrogen applications). If soil test levels are in the low to medium range, cutbacks may equal small savings up front, but substantial yield losses in the end. Managing fertilizer inputs should be viewed as a long-term investment strategy. By building P & K levels into the high range, growers buy flexibility during market fluctuations.

Myth #3 – *I only need to worry about nitrogen.*

Fact. It is rarely a good idea to have all your eggs in the one basket. Diversification creates a better chance of reaching goals sooner. In a crop nutrient program, that means assuring crops have a balanced supply of all 17 essential nutrients, including phosphorus, potassium, and the secondary and micronutrients, to ensure deficiencies do not limit a crop’s yield potential.

Myth #4 – *It’s good to stick to the same fertilizer program every year.*

Fact. Just because a fertilizer program was successful five years ago, does not mean it is effective now. The soil is a dynamic, changing environment. Many factors, including management, temperature, crops and varieties grown, and the nature of the soil itself, influence the soil’s ability to supply needed nutrients to a growing crop. Producers need to keep a watchful eye over their soil

management program to ensure each crop gets the nutrition it needs to thrive. Regular soil testing will help growers define soil fertility levels and identify which nutrients need to be supplied.

Myth #5 – *I can catch up on proper soil fertility levels next year.*

Fact. If soil test levels are in the high range, “catch up” certainly is possible. But ongoing soil test summaries compiled by PPI reveal a trend that growers are not catching up; they’re getting further behind! When soils are mined of plant nutrients and not properly replenished, it’s often more difficult financially to return soil productivity to its original level because of the cost of applying several year’s worth of nutrients in one year (and this may not be environmentally sustainable). To consistently achieve top yields, it is critical to build and maintain proper soil fertility levels.

Leave No Nutrient Behind

Dr. Rob Mikkelsen, a regional director for PPI, agrees that growers need to stay ahead of the soil fertility curve. “Top quality crops require an adequate supply of *all* essential nutrients for optimum growth,” he says. “If shortages exist, growth will be limited by the nutrient that is in shortest supply.”

This ‘leave no nutrient behind’ rule, better known as “Liebig’s Law of the Minimum,” is a proven concept that serves crops well, adds Dr. Joe O’Connor, agronomist for IMC Global

“Maintaining proper soil fertility levels helps promote vigorous plants that can better resist disease and pests, thereby improving crop yield and quality,” he says.

He recommends growers consider applying K-Mag (also known as Sul-Po-Mag). “Particularly where shortages of magnesium and sulfur occur, K-Mag can produce a significant yield response.”

Recommended by Certified Crop Advisors and agronomist across the country, K-Mag offers a unique combination of nutrients and benefits:

1. **3-in-1 Nutrient Combination** – K-Mag supplies three essential nutrients – potassium (K) 21.5-22%, magnesium (Mg) 10.5-11% and sulfur (S) 21-22% – all in the highly available water-soluble sulfate form.
2. **100% Natural** – K-Mag comes from the world’s largest and purest deposits of langbeinite ore. As water evaporated from the large, ancient ocean that is now eastern New Mexico, langbeinite was one of the last minerals that formed. It is now located deep below the earth’s surface.
3. **OMRI-Listed** – A 100% naturally occurring mineral, K-Mag Natural grade was recently listed by the Organic Materials Review Institute (OMRI) for use in organic crop production.
4. **Immediate Nutrient Availability** - K-Mag is in the water-soluble sulfate form, so its nutrients are readily available.
5. **Low Chloride** - K-Mag is low in chloride, minimizing the potential for fertilizer “burn.”

6. **Unaffected pH** - As a neutral salt, K-Mag does not increase soil acidity. It supplies needed potassium, magnesium and sulfur without changing pH levels.

Heinen also is a proponent of K-Mag fertilizer. “K-Mag offers a natural and cost-effective 3-in-1 crop nutrient option, helping to supply K, along with Mg and S, in the right balance.

“K-Mag enhances crop growth and maintains environmental quality by supplying essential plant nutrients in the sulfate form,” he continues. “Using appropriate application rates and timing, it can minimize leaching and nutrient loss, while encouraging more efficient use of applied N and P.”

For additional K-Mag information, contact your local fertilizer dealer. Also, visit www.kmag.com and www.back-to-basics.net. For information on Oakhill Consulting, go to www.dirtdoc.com.

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