

# Survey Shows Lack Of Sulfur In PA Soils

HOPEWELL, VA — In a five-year survey of soil test results from farm land in Pennsylvania, nearly one in three samples were ranked low in the nutrient sulfur.

These results are part of a nationwide survey called "Test For S" that is being conducted by Allied-Signal, Inc., based in Hopewell, VA. Allied initiated

"Test For S" in 1982 to measure the extent of sulfur deficiencies nationwide.

To date, more than 200,000 soil test results have been collected through "Test For S." More than 11,000 are from Pennsylvania. Of these, 3,607 — roughly 32 percent — were ranked low in sulfur. Another 6,628 — about 59 percent

— were rated medium.

Nationally, more than one in three of the soil test results were ranked low in sulfur. Approximately 41 percent were ranked medium. All samples in the survey were analyzed and rated by university or independent testing labs.

According to Don Messick, an agronomist and soils specialist

with Allied-Signal, a sulfur deficiency that goes undetected and uncorrected can reduce the yield and quality of many crops.

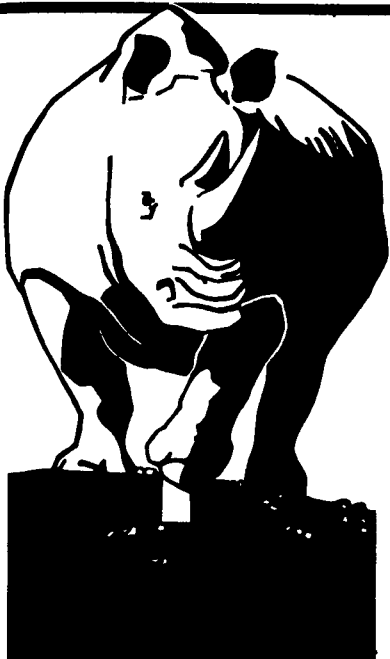
"If a crop lacks sufficient sulfur, or any other nutrient, then it will only grow until it becomes stressed for that nutrient," explains Messick. To avoid midseason shortages of sulfur, Messick advises

growers to tissue test after crop emergence. Field scouting is also a good idea. In corn, look for pale-green to yellow leaves, with striping sometimes evident. If a yield-reducing sulfur deficiency exists, a sidedress application is one way to correct the problem.

"Most farmers already know that sidedressing nitrogen can increase fertilizer efficiency and provide a better return on investment," says Messick. "But few realize that the same holds true for sulfur."

Like nitrogen, sulfur moves easily into the subsoil, beyond the reach of plant roots. To reduce losses from leaching, Messick says growers should combine sulfur with their sidedress applications of nitrogen. For optimum growth and efficiency, the nitrogen-to-sulfur ratio of the plant tissue should be no greater than 15-to-1.

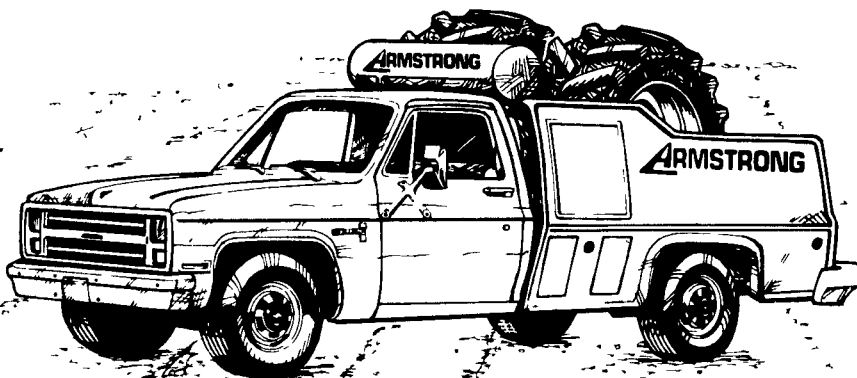
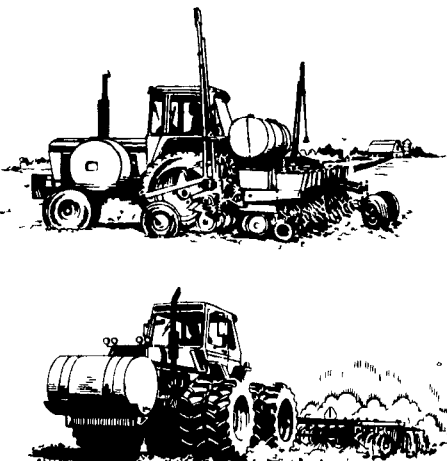
For sidedress applications, it's important to use a fertilizer that contains the sulfate form of sulfur, such as ammonium sulfate (21-0-0-24S). "Sulfate is the only form of sulfur that can be taken up by crop roots," explains Messick. "Elemental sulfur, on the other hand, must be converted into the sulfate form before it can be used by the crop. This can delay uptake by several months."



## Ride the Rhino



Depend on Armstrong tires to come through for you. They're designed to be as tough and durable as a rhino. Put the Rhino to work for you today.



You'll never know what you'll face when you're working your fields, so meet the challenge with Rhino tough Armstrong farm tires. Bad weather, uneven terrain, long hours - Armstrong takes them all in stride.

These durable tires deliver great traction, stability and the hard pulling power you need. Ride the Armstrong Rhino and get the job done right.

### See Your Local Authorized Dealers Listed Below To Better Serve You

- |   |  |   |  |
|---|--|---|--|
| <p><b>Bethel, PA</b><br/>Zimmerman's Farm Service<br/>School Road<br/>717-933-4114</p>            | <p><b>Leola, PA</b><br/>Leola Tire<br/>258 West Main St.<br/>717-656-2574</p>  | <p><b>Quakertown, PA</b><br/>Keller Farm Machinery<br/>116 Richlandtown Pike<br/>215-536-4046</p> | <p><b>Seaford, DE</b><br/>Kent Sussex Tire Center<br/>Norman Eskridge Hwy.<br/>302-629-5533</p>  |
| <p><b>Bethlehem, PA</b><br/>Service Tire<br/>2320 Avenue A<br/>215-691-8473</p>                   | <p><b>Lititz, PA</b><br/>Martin's Tire Service<br/>102 W. Burkholder Dr.<br/>717-733-8855</p>                                  | <p><b>Quakertown, PA</b><br/>C.J. Wonsidler<br/>R.D. #1<br/>215-536-1935</p>                      | <p><b>Elmer, NJ</b><br/>Fred Harz &amp; Son<br/>Route 40<br/>609-358-8128</p>                    |
| <p><b>Ephrata, PA</b><br/>Ditzler Firestone<br/>259 N. Reading Rd. (Rt. 272)<br/>717-733-7993</p> | <p><b>Malvern, Devault, PA</b><br/>Baird &amp; Rudolph Tire Co., Inc.<br/>Phoenixville Pike - P.O. Box 87<br/>215-647-1877</p> | <p><b>Reading, PA</b><br/>Service Tire<br/>99 Whitman Road<br/>215-921-8474</p>                   | <p><b>Hammonton, NJ</b><br/>Crescent Tire, Inc.<br/>325 S. White Horse Pike<br/>609-561-1155</p> |
| <p><b>Fairless Hills, PA</b><br/>Service Tire<br/>553 Lincoln Hwy.<br/>215-736-1903</p>           | <p><b>New Berlinville, PA</b><br/>Erb &amp; Henry Equip. Inc.<br/>22-26 Henry Ave.<br/>215-367-2169</p>                        | <p><b>Shoemakersville, PA</b><br/>Kantners Tire<br/>230 Franklin St.<br/>215-562-2567</p>         | <p><b>Marlton, N.J.</b><br/>Cherry Valley Ford Tractor<br/>Rt. 70<br/>609-983-0111</p>           |
| <p><b>Harrisburg, PA</b><br/>Service Tire<br/>1201 South Cameron St.<br/>717-238-8473</p>         | <p><b>New Tripoli, PA</b><br/>C.J. Wonsidler<br/>R.D. #2<br/>215-767-7611</p>  | <p><b>York, PA</b><br/>Service Tire<br/>R.D. #10 Woodberry Road<br/>717-792-2684</p>              | <p><b>Mount Holly, NJ</b><br/>Highway Tire<br/>Route 38<br/>609-267-5300</p>                     |
| <p><b>Kennett Square, PA</b><br/>College Tire<br/>555 West State St.<br/>215-444-5030</p>         | <p><b>Oley, PA</b><br/>C.J. Wonsidler<br/>R.D. #2<br/>215-987-6221</p>   | <p><b>Hockessin, DE</b><br/>Wynn's Service Center<br/>Lancaster Pike<br/>302-239-5205</p>         | <p><b>Ringoes, NJ</b><br/>Champion Tire<br/>Route 179<br/>201-782-0880</p>                       |
| <p><b>Pikeville Equipment, Inc</b><br/>RD 2, Oysterdale Rd.<br/>215-987-6277</p>                  | <p><b>Millford, DE</b><br/>Kent Sussex Tire Center<br/>251 North Rohoboth Blvd.<br/>302-422-3337</p>                           | <p><b>Sewell, NJ</b><br/>T &amp; W Tire<br/>Route 47 Hurffville<br/>609-589-5390</p>              |  |

**Tarkelp hand soap**

Tough on Grime...  
Gentle on Your Hands...  
Economical to use...  
Cleans completely...  
No residue or odor

Available at many fine stores.  
If not available from your dealer contact:

**Phillip N. Cook, Dist.**  
**215-383-7095**  
At Roots Manheim on Tuesdays

**STEFFEN SYSTEMS, INC.**  
HAY HANDLING EQUIPMENT

**Bale Accumulator**

The Steffen Systems Bale Accumulator conveniently and easily packages up to ten 2-tie bales or eight 3-tie bales into a uniform arrangement which can easily be handled by one of the Steffen Systems loaders. The fully automatic electric over hydraulic controls operate the accumulator without the need of an operator. With its quick and smooth functions, there is no need to slow down the baler to allow for proper functioning of the machine. Also available for use in 2-tie bales is an optional tie bar.

**David O. Fink**  
RD 1 Box 429-F  
Germansville, PA 18053  
215-767-1408