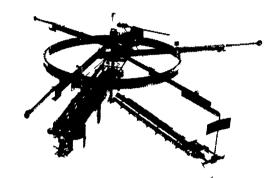


#### Silo-Matic 9200 Unloader



The Silo-Matic 9200 Unloader provides high-volume forage discharge for modern feed lot efficiency. The main drive has no collector ring to short out and rotates at only 110 RPM to give longer running life. On the outer end of the heavy duty 16-inch auger is a 12-inch stub auger with knives and a heavy duty five-bladed cast chipper wheel with reversible hardened knives. A floating drive socket with a friction disk slip clutch moves the unloader around the large 9-foot diameter ring. The 16-inch, heavy-duty auger is powered by a 60-pound gearbox which brings forage to the center for the delivery chain. A heavy duty hook chain with hardened cutters conveys the high volume of forage from the sweep auger to the inside chute. For more information, contact Fickes Silo Co., Inc., Newville.

#### ABS names vice president

Cochran has joined American Breeders Service as Vice President, Finance according to an announcement by Dr. Robert E. Walton, President and General Manger of ABS.

Cochran was born in Franklin, Indiana, then moved to Mount Vernon, Iowa. She earned a B.A. in Economics in 1975 from DePauw University graduating with High Honors and Honors in Major Field and then studied at the University of Chicago Graduate School of Business where she obtained a Masters in Finance in 1977.

Following graduation, Cochran was employed for two years as Financial Analyst for Pan American World Airways. She then joined W.R. Grace & Co., parent company of ABS, as Financial Analyst for the General Business Group (GBG) based in New York.

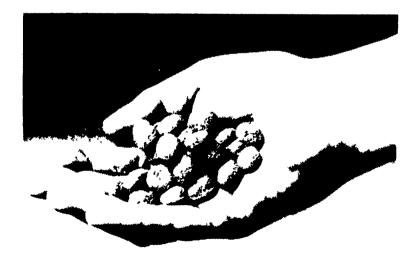
Cochran was named Sr.

DeFOREST, WI - Jacqueline L. Financial Analyst (GBG) in 1980, Manager of Financial Planning (GBG) in 1981, and Director of Financial Planning & Analysis (GBG) in 1982. She held this position until her recent appointment with ABS.



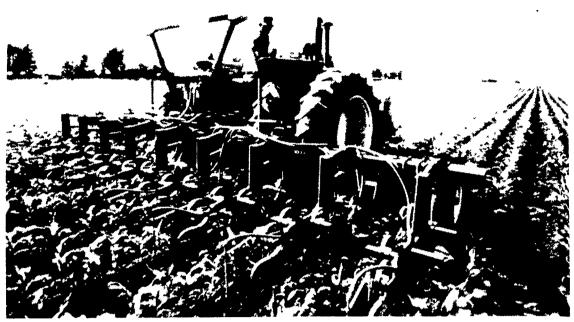
Jacqueline L. Cochran

### Agway's new horse feed



A new horse feed in "nugget" form has been introduced by Agway. Designed to reduce digestive disorders, it also promotes more complete utilization of feed nutrients.

## In some soils, sulfur is "fourth major nutrient"



Piggybacking sulphur with sidedressed nitrogen will help avert a mid-season S deficiency and maintain an optimum N:S ratio within the crop. Here, corn grower bands both nutrients in one application during cultivation.

Trivia Quiz: Name two common raits of the following fertilizersurea, anhydrous ammonia, N solution, ammonium nitrate, ammonium phosphate, triple superphosphate and muriate of potash.

Answer: They're all popular, highanalysis grades that let farmers and dealers apply more N, P and K per payload, and they all share the dubious distinction of not containing any sulphur - or what many agronomists now call the fourth major nutrient.

As a result, crops grown in fields treated with these concentrated fertilizers could run short of sulphur this summer and suffer reductions in yield, quality and protein content, says Bob Morris, agronomist at The Sulphur In-

The need for sulphur in profitable, high-yield production is not something new, but its benefits weren't fully appreciated until farmers unintentionally stopped using it in their fertilizer programs.

"Years ago, when farmers used lower analysis N-P-K fertilizers such as normal superphosphate, low-grade potash salts and ammonium sulfate, they automatically applied significant amounts of sulphur to their fields, often without realizing it," Morris explains.

'But now, with farmers consistently applying high rates of concentrated N-P-K fertilizers,

crops aren't getting as much S as they used to and we're seeing sulphur deficiencies appear where we have not before.'

More than 20 years ago, crop responses to sulphur had been officially recorded in 13 states. Today the number is up to 35, and it is likely that S deficiency will continue to spread unless farmers take steps to reverse the trend.

Higher crop yields naturally require higher rates of all nutrients, Morris adds. A 200bushel corn crop, for example, removes 33 pounds of sulphur from each acre of soil.

#### **More Prevalent** This Season

Morris suggests that sulphur deficiencies could be even more

prevalent this season because some grain farmers, in an effort to reduce crop-production costs and improve cash flow at planting time, may have decided to "economize" with only a basic N-P-K program in areas where sulphur is needed.

"You have to remember that if a crop has a significant shortage of any one nutrient-whether it be sulphur, zinc, magnesium or whatever-it's not going to be able to make efficient use of N, P, K or other nutrients," Morris says. "Economizing on well-balanced fertility could end up costing you money instead of saving you money.

Morris warns that heavy rainfall in some regions of the country may increase the probablity of a midseason sulphur deficiency. Like nitrogen, sulphur is a mobile nutrient and, in coarse-textured soils, is easily leached from the topsoil, beyond the reach of crop

"If you think excess moisture leached some nitrogen from your soils, you probably lost some sulphur as well," he says. "If you are sidedressing or topdressing nitrogen, you might consider including some sulphur.'

Morris says tissue testing will provide a good indication of a crop's sulphur status, especially if results are cross checked with recent soil-test results and field history.

"If the N:S ratio is wider than 15 to one, your crop may benefit from sidedressing sulphur," Morris says. Because sulphur is not as readily absorbed from the soil as nitrogen, a narrower ratio of applied N and S is recommended to maintain a 15-to-one ratio within the crop.

Farmers should be selective when buying a sulphur fertilizer for mid-season applications. Morris recommends a fertilizer containing sulphur in a soluble form to ensure faster crop uptake. Other nutrient needs should also be considered, as many sulphur sources also contain nitrogen, phosphorus and zinc.

For more information on sulphur's role in profitable, highyield crop production, write to The Sulphur Institute, 1725 K Street NW, Washington, D.C. 20006.

# Lehigh distributes cash dividend



Lehigh Valley Farmers president Alpheus Ruth made a "special delivery" to Plushanski Farms in Kutztown. Charles Plushanski and more than 1300 other Lehigh producers received dividend checks this week.

Part of an overall cash dividend payment of nearly \$600,000, the checks accompanied patrons' certificates of equity in the organization that totalled more than \$3 million.

During the past year Lehigh Valley Farmers also paid out nearly a million dollars in premiums and quality bonuses. The cooperative's members produced 894 million pounds of milk last year.