

Benefits Seen On Hog Finishing Floor

Hog Producers Profit From PRV Vaccination

ANDY ANDREWS

Lancaster Farming Staff

DENVER (Lancaster Co.)

Swine producers can make at least \$13 return for each dollar invested in vaccinating their hogs against pseudorabies virus (PRV), according to research on lean-type carcass pigs.

The study, conducted by Dr. Tim Loula, a veterinarian from St. Peter, Minnesota, was conducted on an all-in, all-out finisher system with four replications.

About 224 pigs were used in the study, which also used pigs not treated to the vaccine (and exposed to the virus) in the same building to study the effects of pseudorabies.

"This is the first study I've seen that gives an economic justification for vaccinating finishing hogs against the virus," said Dr. Timothy P. Trayer, DVM, of

Hutchison, Trayer & Reed Veterinary Associates.

Trayer is working with swine producers in the region to eliminate PRV and develop programs that limit economic impact on production.

"The article supports my professional view that with active field virus on a swine finishing

floor, the vaccination is cost effective, will reduce field virus shedding, and will reduce the impact of other health problems," said Trayer.

The location of the study was southern Minnesota, from March 7, 1990 to July 23, 1990.

One of the important findings of the study was that, when pseudora-

bies was present on the floor, other types of diseases became prevalent, including Haemophilus pleuropneumonia (Actinobacillus pleuropneumonia).

And a combination of the PRV and another infection, Streptococcus suis, reduced average daily gain more than either agent alone, according to research by Dr. Ger-

aldo Iglesias at North Carolina State University.

Hog producers, according to the researchers, must be committed to eliminating PRV.

"There are not many studies done that will give these kinds of conclusions," said Trayer.

The study will soon appear in a leading swine journal.

Be On Lookout For Potassium Deficiencies

ATLANTA, Ga. — "Firing" of the lower leaves in corn is often attributed to moisture stress or nitrogen deficiency, but it's likely that in some cases it is caused by potassium deficiency.

The last several summers have seen an increase in visible potassium deficiency in several corn crops. When corn is deficient in potassium, the margins of the low-

er leaves turn brown and lower leaves drop off prematurely. The plant will be stunted in growth, with delayed development and maturity.

If you are unsure the symptom observed is potassium deficiency, plant analysis can be a helpful diagnostic tool. Collect 20 to 30 whole plants from corn less than 12 inches tall. If corn is more mature, collect the last fully developed leaf from 15 to 25 plants. Collect samples from both the poor and better areas of the field for comparative purposes. The lab will provide an indication of sufficiency level.

When potassium deficiency symptoms are visible, yields have already been hurt. It takes a rather severe deficiency to produce distinctive symptoms. Unfortunately, there is little that can be done for this year's crop. However, fertility management needs to be modified to correct the problem for next year. That starts with a soil test of the problem field to determine existing soil test potassium levels.

Part of the apparent increase in frequency of potassium deficiency is due to a decrease in tillage in corn production. The most severe deficiencies have been noted in

ridge-till and no-till fields, in many cases even when soils test in the high range for available potassium. The reduction in potassium availability may be due to increased soil density, altered soil potassium distribution, changes in root distribution or shape, or soil moisture and temperature differences.

Some corn hybrids are more sensitive than others to marginal potassium availability. In a 1990 ridge-till study in Minnesota, yield response to a fall band application of potassium was 53 bushels per acre for one hybrid and 34 bushels for another. Hybrid differences may be caused by differences in root growth.

Potassium deficient corn is bad for profitability and bad for the environment. As yields decrease below the projected level, the amount of soil nitrate present after harvest is greater, increasing the potential for nitrate leaching into groundwater.

Watch your fields carefully this summer. The "firing" you see may not all be due to moisture stress or nitrogen deficiency.

Watch For

(Continued from Page D8)

inject anhydrous ammonia into large round bales, but these are not yet sold commercially. Currently the most readily available means of treating moist hay is to cover bales with plastic and then inject them. Since the ammonia may not distribute uniformly, portions of the bale may spoil.

Pelleted urea can be converted to ammonia by bacteria normally found on hay. Application of urea, therefore, is much simpler than using anhydrous ammonia gas. Researchers have found that relatively large amounts of urea (5-7 percent, as baled) applied during baling can preserve hay containing up to 30 percent moisture. Urea is only effective, however, if the hay is stored shortly after baling and covered tightly with plastic sheeting. Again, ammoniate only good to high-quality forages to no more than one percent (as baled) and feed cautiously.

Recently, many types of microbial hay preservatives have been developed. In general, these products do no harm, but they have only limited proven ability to preserve hay.

Propionic acid and anhydrous ammonia (application rates of about one percent of wet forage weight) are the only preservatives that are consistently effective on hay containing 25-30 percent moisture.

Other preservatives may be effective on hay containing 20-25 percent moisture (follow manufacture directions), but many have not been scientifically tested.

Preservatives other than ammonia and urea do not improve feeding value, but can reduce storage losses.

Hall emphasizes that it is essential to know the moisture content of the hay before baling. Hay containing more than 30 percent moisture should not be baled even with a preservative.

Four National Dairy Shows Set

HARRISBURG (Dauphin Co.) — Four national dairy breed association have again selected the Pennsylvania All-American Dairy Show in Harrisburg for their national breed shows.

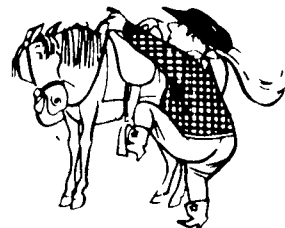
The American Jersey Cattle Club has scheduled their Mid-Atlantic Regional Show, the Holstein Friesian Association scheduled their Eastern National Show, the National Brown Swiss Association will hold the Eastern Brown Swiss Show and the American Guernsey Association its national show.

Last year, nearly 2,000 top dairy animals were exhibited. "We expect at least that many for the 28th annual show," said show manager, Charles Ite. "September 23 through 26th are the dates and the place is the nationally known Farm Show Complex in

Harrisburg, Pennsylvania."

The All-American has always attracted nationally known breeders and exhibitors of all six major dairy breeds from as far away as California, Texas, Florida, Maine, Wisconsin and Canada, as well as Pennsylvania, Ohio, Maryland, New York, Virginia, Kentucky, Indiana, the Carolinas and the New England states.

SADDLE UP!



TO BETTER EQUIPMENT
Find It In Lancaster Farming's
Classified Pages.

1 FARM EQUIPMENT

10-ANI rebuilt spreader, new wood. Cunningham hay crimper. 2-Horse wagon, 1-Horse wagon, buckboard pony cart, harness Fred Co. 301/845-8650 after 8PM

151 Int combine, 12' grain head, stored inside, field ready, \$1,500 (607)868-4605.

185 Int. Cub Low-Boy with 5' mower, very nice, \$2,900. 1930 Model-A Ford Pick-up Truck, A-1 condition, \$8,500 Firm Also wanted 16" pads and rails for AC HD-6, must be good condition 717/784-1779

1947 Farmall-"A" Plow, cultivators, snow plow, power lift, excellent, \$1,500 OBO 717/394-8868

1974 7700 JD hydraulic combine w/grain head w/air \$6000 OBO 215-837-1718

1975 MF 1135, good rubber, new paint, 9852450, excellent condition, \$11,500. (717)864-2422

DO YOU HAVE a Farmec, Smoker, Hub, NH or MLR #155 hay and grain elevator? WE HAVE new parts for it! New Holland Elevator Co. (717)687-0102.

Deere 3300, very nice, \$4,950, 4400 gas, very clean, \$4,950 Larry Stalter "The Combine Man" 1-800-248-2151

Deere 5200 chopper, small knives, 1,003 hrs., about like new, \$19,500 Can Finance 1-800-248-2151

Deere 5400, 2 heads, very good, \$19,900 Larry Stalter "The Chopper Man" 1-800-248-2151

Deere 5400 chopper, 4x4, 619 engine, very good, \$26,900 Can Finance 717-538-5555

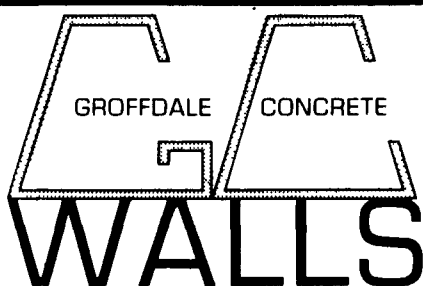
Deere 5400 chopper, nice, small knives, 1,560 hrs., \$24,700 Financing Available Larry Stalter "The Chopper Man" 1-800-248-2151

Deutz Allis 385 no till soybean planter, 7 row 15" fac-ing, excellent condition 717/532-2699

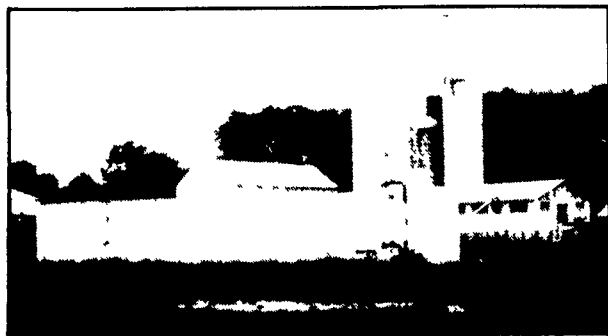
DISMANTLING FOR PARTS Fiat Allis 11B 25L S/N, late model powershift dozer w/OROPS, powershift trans All parts available

BALANDA EQUIPMENT
PO Box 407
Route 29
Palm, PA 18070
1-800-322-8030

DITCH bank mower Woods S-106, loaded, like new, w/new warranty, \$2500. 301-833-9091



WALLS INC.
430 Concrete Ave.
Leola, PA
717-656-2016

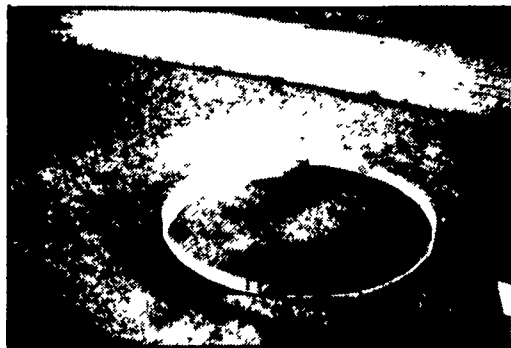


WE SPECIALIZE IN EARTHEN CONCRETE LINERS FOR MANURE STORAGE

ESTABLISHED SINCE 1979
• AGRICULTURE • COMMERCIAL • RESIDENTIAL

WE ORIGINATED THE CONCRETE SYSTEM!

- WORKING WITH FARMERS WITH CHESAPEAKE BAY FUNDING -



IN GROUND MANURE STORAGE SYSTEM

Our Sales Tool Is A Satisfied Customer - Call Us For Information!

WE WORK HARD FOR CUSTOMER SATISFACTION
SIZES AND LAYOUTS TO YOUR SPECIFICATIONS