BUSINESS NEWS...

New mastitis dry cow treatment reported

KALAMAZOO, Mich. — Research citing the efficacy of a new, dual-antibiotic dry cow treatment product for mastitis was recently discussed at the 78th Annual American Dairy Science Association Meeting, held at the University of Wisconsin-Madison.

Dr. Lew Henke, reasearcher for The Upjohn Compnay, told the audience that the new product, called Albadry Plus, contains 200,000 I.U. of penicillin and 400 mg of novobiocin, and is the first commercial product to combine these two antibiotics in a dry cow tube.

"The research and development program for Albadry Plus was initiated in 1974," explained Dr. Henke. "The Upjohn Company recognized the need for a dry cow intramammary product that was active against strains of Staph. aureus and streptococci — the most common bacteria associated with mastitis. Novobiocin is very effective against staphylococci, while penicillin is the drug of choice for treating streptococcal infections. Research was then conducted to determine if this anitibiotic combination would actually be effective against mastitis infections."

According to Dr. Henke, once the most efficacious balance of penicillin/novobiocin in the Albadry Plus formulation was determined, private investigators from across the U.S. helped Upjohn researcchers test the product's efficacy. These investigators, from the dairy areas of New York, Michigan, Minnesota, Louisiana and California, selected more than 700 cows from 70 herds for use in the trials.

Duplicate quarter milk samples for microbiological examination were collected from each cow and the cows were divided into treated and untreated groups. "All four quarters of each treated cow were infused with Albadry Plus," Dr. Henke explained. "Later, milk samples were again collected 4-10 days post-freshening, to determine the infection status of each cow and to compare untreated cows with treated cows." Pre-treatment and post-calving infection data on the efficacy of the Albadry Plus formulation were also statistically analyzed.

The results: of the 101 treated cows infected with Strep. agalactiae, the elimination rate with Albadry Plus was 100 percent, while the spontaneous cure rate among the 91 untreated, infected cows was 39 percent. Among the 143 cows infected with Staph. aureus, the elmininations rate with Albadry Plus was 59 percent; the spontaneous elimination rate among untreated cows was 28 percent. Cows receiving Albadry Plus at drying off had lower post-partum infection rates of mastitis due to Staph. aureus, Strep. agalactiae or other mastitis streptococci than the unmedicated cows, emphasized Dr. Henke.

"Under these well-controlled trial conditions, the antibiotic formulation in Albadry Plus was shown to be effective in combatting the most common mastitis-causing pathogens," Dr. Henke concluded.

Agway holds sales schools

TULLY, N.Y. — Lester Kreider, of Lancaster, and Charlie Bergamo, of Vineland, N.J., joined 160 other Agway enterprise sales people attending one of two farm sales schools held recently to review the latest technology and new programs aimed at more profitable farm management.

They participated in three days of seminars and presentations on feeding and management for maximum production response in dairy animals and picked up ideas to pass on to farm clients on improved crop management programs.

In the dairy feeding sessions, participants reviewed the use of programmable calculators for on-farm designing of complete dairy feeding programs to provide the most profitable combinations of farm-grown and purchased seeds.

Also reviewed were several new feeds soon to be introduced by Agway, calf and heifer and dry cow feeding and management programs, total mixed rations (TMR) and the new Cattle-Code (computer controlled) feeder, a mechanical unit which provides supplemental concentrates for individual high producing dairy cows.

On the crops side, participants received an up-date on the latest technology and new components of Agway's ICM (Integrated Crop Management) programs. These include new Agway seed corn varieties adapted specifically for Northeast farms, new alfalfa management programs and alternatives to alfalfa, including selected grasses, clover and legume-grass mixes.

Agway recently introduced the AgriPlanner micro computer which is being used at many locations to assist farmers in selecting the most profitable combinations of cropping, fertilization and pesticide application to meet their individual requirements.

The latest information on mini-bulk handling of crop pesticides for farmer application was presented and newly developed application equipment was inspected at the Agway Farm Research Center near Tully, NY.

Local farmer meetings and individual on-farm demonstrations will be conducted to share information learned with farm clients.

Lester Kreider, enterprise salesman from Lancaster and Charles Bergamo, area manager from Vineland, NJ, inspect new mini-bulk handling pump at Agway Farm Research Center near Tully, NY. The equipment is used to speed application of farm pesticides during busy growing seasons.

Case introduces 'constant traction'

RACINE, Wisc.—J. I. Case has just introduced a new line of Case 94 Series agricultural tractors at a dealer convention in Kansas City.

The new introduction features a design concept termed "constant traction."

The 162 PTO horsepower Case Model 3294 Constant Traction tractor is a high horsepower row-crop tractor with the tractive efficiency of the four-wheel drive model.

The term "constant traction" describes the way the front-drive and rear-drive wheels are synchronized and always engaged, similar to the four-wheel drive tractors. There is no disconnect or clutch between the front drive wheels and rear drive wheels, maximizing the tractive advantages of a four-wheel drive tractor.

A quantity of engineering prototypes of the Case Model 3294 tractors have been put through their paces by farmers throughout North America during a year-long evaluation and test program. Comments from farmers include the following:

-"The 3294 provides increased usage over my larger tractor. This should reduce my per-acre cost."

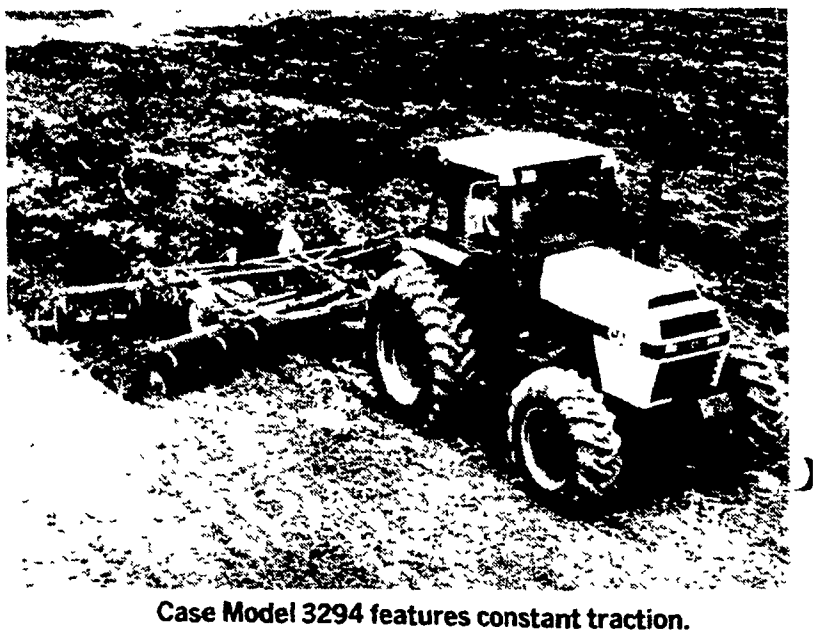
-"It burns about 15 percent less fuel than my large horsepower two-wheel drive tractor with the same horsepower."

-"The 3294 is easily maneuverable, you rarely have to use the brakes when turning in tight situations."

-"It runs when my two-wheeler is sitting in the barn. The traction is there with minimum wheel slippage."

-"The 3294 is a real workhorse with PTO. It has the power to handle PTO. It was a first class forage-harvestor and still had power left to pull a heavily loaded wagon up my hills."

As farmers tend to alter their tillage practices, the idea of tractive efficient tractors will become more important. As the prices for fuel have risen more than 170 percent in the past five years, the importance of fuel efficiency becomes paramount for farmers. This tractor concept will lend itself well to the adoption of new farming practices as farmers strive for increased efficiency.



Case Model 3294 features constant traction.

Automatic combine is already in the fields

DES MOINES, Ia. — A combine that steers itself electronically while automatically controlling harvesting speed and header height is already being field tested.

Its purpose, according to Dick Jones, director of the Massey-Ferguson Electronic Center, is "to increase bushels harvested per acre and to boost the farmer's overall productivity. It all adds up to making combining more efficient and profitable."

Equipped with several microcomputers, a combine information center, and a sophisticated electronics system, the developmental combine has been averaging 25 percent better productivity over comparable standard machines. In some cases, such as uneven soybean crops, it has tallied daily productivity gains of 50 percent.

Being developed by the MF Central Electronics Group, the experimental combine is believed to be "some few years from the market," according to Jones.

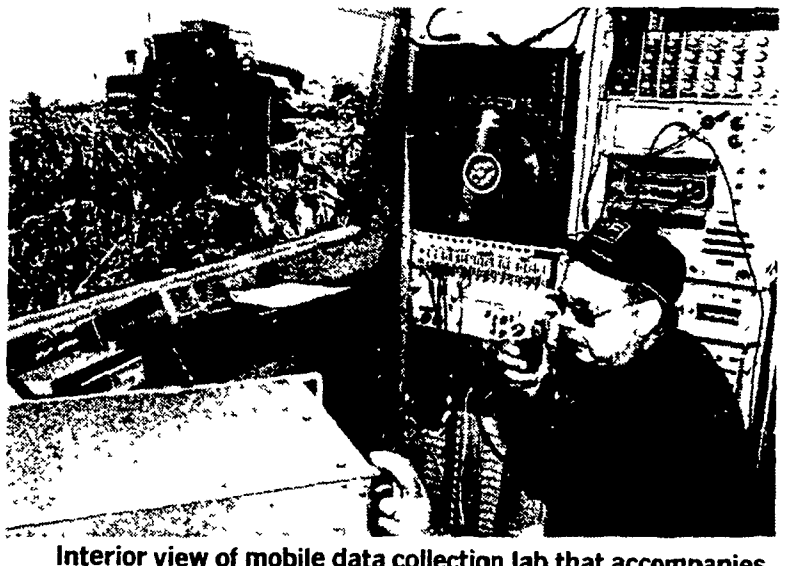
"We still have a lot of work to do on new and different wiring systems and more simplified electronics," he said. "But we have no doubt that this machine is the forerunner of a new generation of MF combines."

Cost of the high technology combine will not be overwhelming. The systems are expected to add less than three percent to the price of the machines - a cost the farmer can swiftly recover from increased bushels harvested per acre.

In addition to increasing productivity, the new combine's design will minimize downtime. According to Jones, the unit will be designed to prevent overloading of the engine and various critical drive components.

The four main physical systems on the developmental combines are: forward speed control which adjusts automatically to varying crop densities; automatic header height systems which will be much more sensitive than conventional ones now in use; an operator information center which instantly displays harvesting performance results and grain loss figures; and the automatic guidance system which steers the combine by measuring the position of the table head in relation to the standing crop.

These systems will also help to simplify combine operation and reduce operator fatigue. Various routine operating decisions and adjustments which now must be repeated continually will be decreased or eliminated. At the end of each day, the on-board computers will print out daily production results and servicing needs.



Interior view of mobile data collection lab that accompanies the Massey-Ferguson experimental combine to its field test sites. The lab monitors and records data transmitted from 30 sensors on the combine. Test results show possible productivity gains of 50%.