

Vitamin E Helps Dairy Cows

PARSIPPANY, N.J. — A large body of evidence points to the fact that vitamin E supplementation can moderate the effects of specific diseases in dairy cattle according to an animal nutrition corporation.

Some of the most recent research suggests levels of vitamin E beyond those needed for normal growth and reproduction may actually enhance bovine immune systems.

"Vitamin E in Animal Nutrition and Management," a new reference manual published by BASF Animal Nutrition, summarizes the state of current knowledge on the topic.

Vitamin E is essential for the integrity and optimum function of reproductive, muscular, circulatory and immune systems, said Dr. Michael Coelho, BASF nutritionist and technical service manager.

Recent studies have focused on the possible enhancement of animal immune systems by feeding vitamin E in amounts greater than those required for normal growth and reproduction. Most reports indicate that vitamin E alone or in combination with selenium enhances immunity in a variety of

species, Coelho said.

There is growing evidence that supplemental vitamin E can help control mastitis and other diseases in dairy cattle he said.

In a 1984 study supervised by K. Larry Smith of Ohio State University, first-lactation heifers supplemented with vitamin E and selenium showed significantly fewer quarters infected at calving, reduced prevalence of infection throughout lactation, fewer cases of clinical mastitis, infections of shorter duration and lower somatic cell counts when compared to unsupplemented heifers.

In 1989, Smith, J.S. Hogan and Ohio State co-workers studied the incidence and causes of mastitis in nine well-managed dairy herds for one year.

"The major mastitis problem in these herds was clinical mastitis, and the overall incidence was approximately one new clinical case per two cow lactations," Smith wrote.

Diets of dry cows and the rations fed to the top-producing third of the lactating cows were analyzed three different times during the year for vitamin E and selenium. It was found that the

lower the level of vitamin E in the cows' diets, the higher the incidence of clinical mastitis. The same correlation existed between mastitis incidence and levels of selenium in the cows' blood.

Serious mastitis control begins with a good program of post-milking teat-end disinfection, total dry cow therapy and a clean, dry environment for the cows, Smith said. But he added, "The degree of success of these hygienic measures may to some degree depend on the resistance of the herd to disease."

Holstein cows need 1,000 International Units (IU) of vitamin E per cow during the dry period and lactation, the Ohio State scientist said. "The exact supplemental amount of vitamin E will depend on the quality and amount of forage being fed."

Vitamin E occurs naturally in a wide variety of feedstuffs, but current feedstuff preservation practices may cause serious reductions in vitamin E levels in livestock rations.

"Rations containing high-moisture grain may require more vitamin E supplementation than

rations containing dried grain," Coelho said. "A number of factors must be considered, such as the initial vitamin E level of the feedstuff and any additional processing it has undergone."

"The discovery of vitamins is relatively recent," said Coelho.

"In fact, vitamin E was not identified as a dietary factor until 1922. But just as vitamin E is now recognized as an indispensable part of a balanced human diet, research confirms its importance for animal health and reproduction."

Egg Production Rises

HARRISBURG (Dauphin Co.) — Egg production in Pennsylvania during May 1992 totaled 464 million eggs, up 8 percent from the 429 million eggs produced in May 1991, according to the Pennsylvania Agricultural Statistics Service.

The total number of layers on hand averaged 19.8 million during the month, 6 percent more than May 1991. Production per 100 layers was 2,340 eggs, up from the 2,303 eggs produced during the previous May.

Egg production during the March through May 1992 quarter totaled 1,372 billion eggs, up 8 percent from the same quarter in 1991. The average number of layers on hand for the three month period was 19.6 million, compared with 18.5 million during the same quarter last year.

Egg-type hatch totaled 4.6 million chicks during May 1992, 7 percent less than in May 1991. Cumulative egg-type hatch for January through May, at 20.2 million, was 8 percent less than the

corresponding period in 1991. Broiler-type hatch totaled 10.7 million during May 1992, down 6 percent from the previous year May. Aggregate broiler-type hatch for January-May 1992 was 53.4 million, down 1 percent from the previous year.

United States' egg production totaled 17.7 billion eggs during the March through May quarter, up 2 percent from the corresponding quarter a year ago. All layers in the U.S. on June 1, 1992 totaled 275 million, compared with 272 million a year ago. Rate of lay per day on June 1, 1992 averaged 68.6 eggs per 100 layers, compared with 68.7 for June 1, 1991.

Egg-type chicks hatched during May totaled 38.3 million, 1 percent above the May 1991 total. Broiler-type hatch, at 596 million, was 2 percent above May last year. The 28.6 million poulters placed in the United States during May were 4 percent below the placements during the same month a year ago.



B&M FISHER'S PAINTING & RESTORATION

- ALL TYPES OF INTERIOR & EXTERIOR PAINTING
- SANDBLASTING ■ ROOF COATING
- RESTORATION & WATERPROOFING ON STONE & BRICK BUILDINGS

HOUSES - BARNs - FENCES - FACTORIES - ETC.

Specialists In Sand Blasting/Spray Painting Farm Buildings, Feed Mills, Roofs, Tanks, Etc. With Aerial Equipment

4056A Newport Rd., Kinzers, PA 17535 717-768-3239
On Rt. 772 Across From Poquea Valley School

Brush, Roll Or Spray - We'll Do It Either Way
For Jobs Large Or Small - Our Men Will Do It All

The Round-About® hay tool does everything but the baling.

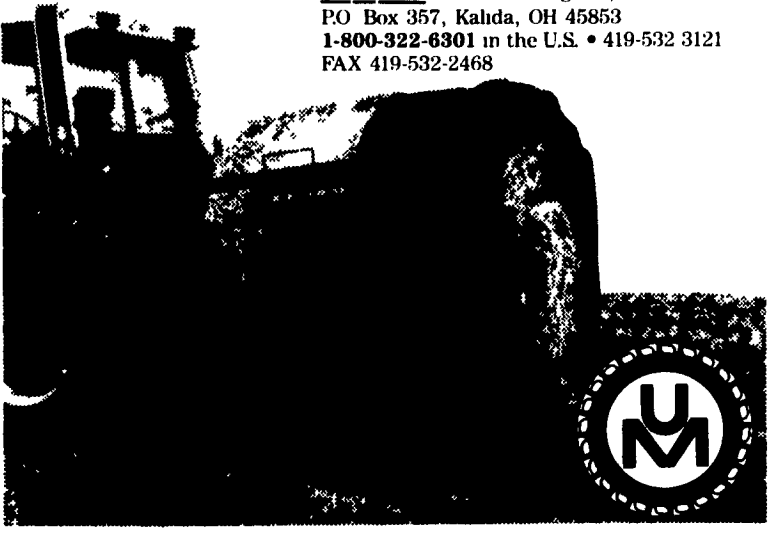
Thanks to its innovative, patented design, Unverferth's Round-About® universal hay tool lifts, spins, wraps, transports, and unrolls round bales of any size or weight. That's complete performance.

Features automatic plastic advancement to make wrapping your round bales a breeze.

To find out more about the advantages of the Round-About® hay tool, call for free literature today.

1-800-322-6301

Unverferth Manufacturing Co., Inc
P.O. Box 357, Kalida, OH 45853
1-800-322-6301 in the U.S. • 419-532 3121
FAX 419-532-2468

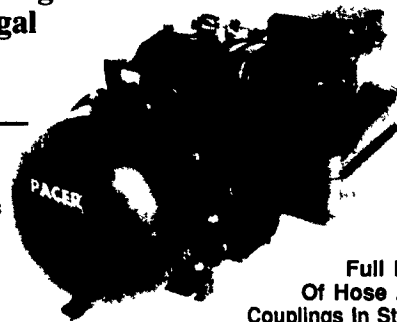


Your Complete Headquarters For Sprayers And Parts

Self-Priming Centrifugal PACER PUMPS

- 3 H.P. 'S' Series 1 1/2" Or 2" Ports

Reg. \$210.00
SPECIAL \$183.75



Full Line Of Hose And Couplings In Stock!

Features:

- Self-priming to 20 feet
- Total heads to 120 feet
- Capabilities to 200 U.S. GPM
- Built in check valve
- Equipped with 1/2" or 2" female threaded connections, NPT

- 5 H.P. 'S' Series 2" Ports

Reg. \$250.00
SPECIAL \$218.75

- 5 H.P. 'S' Series With I/C Briggs Engine, 2" Ports

Reg. \$330.00
SPECIAL \$288.75

- 5 H.P. 'S' Series With Honda Engine, 2" Ports

Reg. \$464.00
SPECIAL \$406.00

- 7 HP 'S' Series Pump 3" Ports - Reg. \$440.00 ... **SPECIAL \$385.00**
- 'S' Series Pedestal Pump Only 1 1/2" or 2" - Reg. \$136.00 ... **SPECIAL \$119.00**

Raven Tough Polyethylene Tanks



- SPRAYER TANKS - ALL SIZES AVAILABLE FROM
- STATIONARY TANKS For Liquid Fertilizer Storage 25 GAL. to 2500 GAL.

We Also Stock A Complete Line Of:

- Teeljet** Sprayer Nozzles And Accessories
- Hypro** Pumps And Accessories
- PACER PUMPS**
- Sprayer Hose
- Ball Valves
- Nylon Fittings
- Poly Tanks

PAUL B. ZIMMERMAN, INC.

285 Weidinger Rd., Little, PA 17543
1 Mile West of Ephrata
(717) 736-1121

HOURS
Mon., Thurs., Fri. 7:30
Tues., Wed. 7:30
Sat. 7-10

• HARDWARE • FARM SUPPLIES • CUSTOM MANUFACTURING • CRANE SERVICE

Veggie Crops Down

HARRISBURG (Dauphin Co.) — Processors in Pennsylvania have contracted 5,600 acres of snap beans in 1992, 1,000 acres below the 6,600 acres contracted in 1991, according to the Pennsylvania Agricultural Statistics Service.

Sweet corn processors have contracted 2,000 acres, down 39 percent from the 3,300 contracted in 1991. Tomato processors have contracted 1,200 acres, down 20 percent from the 1,500 contracted in 1991.

United States' processors have contracted 1.37 million acres of vegetables in 1992 for the nation's four major vegetable crops (snap beans, sweet corn, green peas, and tomatoes). This is down 10 percent from 1991 and 9 percent below 1990.

U.S. snap bean processors have contracted 205,620 acres, down 12 percent from last year. Sweet corn processors have contracted 535,300 acres, down 5 percent from the previous year. Tomato processors have contracted 273,820 acres in 1992, a 24 percent decline from last year. Green pea processors have contracted 352,900 acres, down 1 percent from 1991.