

Using MUN

(Continued from Page 26)

"dilutes" the high protein in pasture. This helps utilize the rumen degradable protein which is then incorporated into rumen microbial protein. If cows are fed only pastures or relatively low levels of supplemental energy, it is expected that the urea formed from the excess dietary nitrogen would elevate milk urea nitrogen (MUN) levels.

Milk Urea Nitrogen (MUN)

Measurement of MUN has been available for a few years from Pa. DHIA and serves as a tool to monitor the nutrition program, or the dietary

protein and carbohydrate balance. The nutritional basis for using MUN testing as a monitoring tool is that excess dietary protein in relation to ruminal available carbohydrates will result in elevated MUN. Low dietary protein in relation to high rumen available carbohydrates will result in low MUN. "Normal" levels of MUN are considered to range from 10 to 16 mg/100 ml of milk.

High quality pasture with high protein would be expected to increase MUN. There is limited information available to show this to be the case with grazing dairy cows. In a current research study at Penn State, we have

Foraging Around, Lancaster Farming, Saturday, February 12, 2000—Page 27

found that cows receiving only pasture in the spring (no supplement) had MUNs of 16 mg/100ml. In contrast, grazing cows fed supplemental grains had MUNs of 10.5 mg/100 ml. There is clearly a difference which suggests some inefficiency in protein utilization with only pasture.

Field Study

A two-year field study in New York with 31 dairy farms found that the majority of the grazing herds had MUN levels were within the 10 to 16 mg/ml range that is considered "normal." We conducted a field study two years ago where milk samples monitored every

two weeks during the spring averaged 14 to 15 mg/100 ml for three grazing herds.

The relatively "normal" MUN levels for pastured herds imply that nitrogen utilization in grazing herds is "normal." Most of the producers in our study and the New York study were balancing the rations and using feeding strategies to utilize available protein from pasture.

Grazing herds that are fed low amounts of supplemental grain and supplemental feedstuffs can likely benefit from routine monitoring of MUN.

QUALITY HAY EQUIPMENT
TO PRESERVE QUALITY HAY CROP



CUMMINGS & BRICKER, Inc.

WHOLESALE DISTRIBUTORS

100 Stover Drive
Carlisle, PA 17013
717/249-6720

100-120 Lehigh Ave. - P.O. Box 928
Batavia, New York 14021-0928
716/343-5411

CALL 1-800-222-8969 FOR DEALER NEAREST YOU

Now Available At: Cummings & Bricker's E-Z Flex Financing. Payments Are Customized to Your Budget!

ASK US ABOUT EZ FLEX FINANCING PROGRAM

WAIVER OF PAYMENTS
or LOW RATE FINANCING

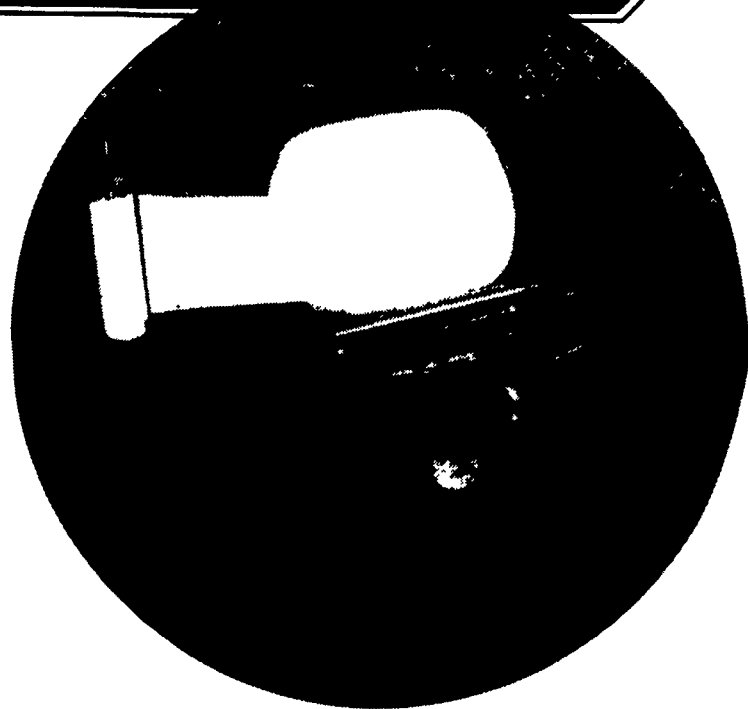


TANCO AUTOWRAP

THE WRAPPER THAT WRAPS BALES OTHERS WON'T

A complete range of Round,
Square & Rectangular Wrappers.

Patented advantages like the unique "Deep Cradle" continuous full width belt, and fully supported turntable where four polyurethane wheels provide Tanco's renowned even and balanced operation, even with overweight and misshapen bales. Quality wrapping and quality machines that has made Tanco among the World's leading manufacturers.



It takes a quality product to do quality work.

TUBE-LINE BALEWRAPPER

For optimum speed and efficiency patented Tube-Line Wrappers are the answer! Tube-Line Wrappers wrap a continuous row of bales. The airtight application of stretch wrap film retains moisture balance as haylage matures and prevents air infiltration. The shrink wrap also prevents wind damage and accommodates variation in bale size and shape without air gaps.

Long stem silage is better used in the animals digestive system. Feeding high quality haylage from wrapped bales can reduce or eliminate feeding grain while retaining or increasing weight gains or milk production.



Tube-Line wrappers for all round bales or large square bales are available in either manual or fully automatic models.

AG WRAP BALE WRAPPER



"NEW" for 99 the EC04-5 Pull Behind Wrapper
For Use On Small Tractors

Wraps Bales up to 5 ft. x 5 1/2 ft.

- 3-Point Hitch
- Hydraulic requirement 4 GPM - 2 remotes
- Pre-stretcher for plastic
- One-man operation
- Wrap on the move
- Transport bales to storage
- Picks bale up, wraps them all hydraulically
- Built in U.S.A.