

# PIEDMONT DAIRY NEWS

December, 2006

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I hope you find this newsletter helpful and informative. Please share your newsletter with your friends and have them contact us if they would like to be placed on our mailing list.



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## Fatty Liver Disease

Fatty liver disease is a major metabolic disorder of many dairy cows in early lactation and is associated with poor health and reproductive performance, decreased feed intake and decreased production. In severe cases depression, ataxia, coma and death result.

Fatty liver develops when the uptake of fat in the liver exceeds secretion. Excess fat is stored in the liver and causes a decrease in liver function. The liver of a diseased cow can be categorized as mild, moderate, or severe fatty liver. In the first month after calving, 5 to 10% of dairy cows have severe fatty liver and 30 to 40% have moderate fatty liver, which indicates that up to 50% of dairy cows are at a higher risk for diseases and reproductive problems associated with fatty liver disease. Insufficient intake, unbalanced rations, obesity, and elevated estrogen concentrations are factors that contribute to fatty liver disease. Because even mild fatty liver is associated with decreased health status and reproductive performance, prevention of fatty liver is essential. Preventing fatty liver by supplying cows with sufficient nutrients and a clean and health-promoting environment in the time prior to calving is much more effective than any treatment. Studies done by Drs. Whitlow and Hopkins, NCSU Extension Dairy Specialists, conclude the importance of several additives to the dry cow ration for fatty liver prevention. First being the inclusion of a **mycotoxin** binding agent. Mycotoxins cause cellular necrosis of the liver and compound the issues related to fatty liver. Next adding the **ionophore monensin** at the lowest recommended level (11g/T) will cause a shift in rumen microflora to promote the production of propionate which improves the cows' glucose supply. Also important was the addition of **rumen protected choline** at the rate of 15 grams/head/day. Choline helps prevent fat accumulation in the liver and aids in its removal as well. Not only should the dry cow ration contain all three of these compounds but so should the fresh cow ration for at least 30-60 days.

For cows that are obese, those who do not eat well for any number of reasons, or those that are in severe negative energy balance because of high milk production immediately after calving, preventive measures may not be enough. Cows who do not respond to the preventive measures may benefit from a dose of propylene glycol and glucocorticoids administered by your veterinarian.

## 2006 Wilkes County, N.C. Corn Hybrid Test Results

HYBRID	DRY MATTER (%)	ADJ. SILAGE YIELD <sup>a</sup> 30% D.M. TON/ACRE (Decreasing Order)	MILK/TON D.M. (lb.)	MILK/ACRE (lb.)	CRUDE PROTEIN (%)
Pioneer 31G71 (tester)	32.0	21.4	3440	23557	9.6
Dekalb DKC 69-68	28.1	19.9	2753	15395	10.4
Dynagro 58P59	27.4	18.4	3283	16552	9.8
Southern States 777RR2YGPL	29.3	18.0	3105	16376	9.7
Hyttest 7749T5	28.7	17.8	3233	16516	8.6
Pioneer 33M53	27.8	17.8	3331	16483	10.9
Asgrow RX 940RR2	21.8	17.4	2681	10170	10.0
Doebler's W784XYG	29.2	17.4	3539	17981	9.3
Trisler T5337PLRR	28.5	17.3	3265	16098	9.4
Mycogen TMF2Q731	25.0	16.8	3226	13537	9.9
Ag Venture 8923	26.3	16.7	3227	14173	10.8
Pioneer 31P41	27.2	16.3	3304	14649	10.4
Vigoro V59YR52	19.2	16.2	2985	9285	9.6
NK N77-P5	27.1	16.1	3573	15589	10.4
Trisler T06-15RRCB	21.0	15.7	2692	8876	9.3
NK N68-B8	29.8	15.4	3306	15172	10.3
Dekalb DK 69-71	25.3	14.9	2805	10574	10.7
Seed Consultants 11RR86	19.5	14.1	2916	8018	10.5
<b>AVG.</b>	<b>26.3</b>	<b>17.1</b>	<b>3148</b>	<b>14389</b>	<b>9.5</b>

**Cooperators:** Cranberry Farms, Gurney Mathis and Sons, Roaring River, NC

**Extension Agent:** Matthew S. Miller, Wilkes County.

**Planting Date:** May 1, 2006

**Silage Harvest Date:** August 17, 2006

**Fertilization:** 2T/A broiler litter, 15 gals. 19-19-0 at planting, top-dress 95 lbs. N

**Soil Test Indexes:** pH - 6.1, PI - 425, KI - 104

**Planting Method:** Conventional

**Herbicide:** 3pt. Gramoxone; 1.5 qt Atrazine, Simazine, .75oz+2.1oz. Steadfast and Banvel post-emergence

**Soil Insecticide:** Force3G, 4.4 lb/A.

a - adjusted to tester yield. The tester hybrid measure variations across the plot. Tester yield is avg of 18 tester entries within the plot.

\* reference to any brand name of chemicals is for educational information only and should not be construed as an endorsement of the product.

\* appreciation expressed to Gurney Mathis and Sons, Company Representatives and NC Corn Growers.



## UPCOMING EVENTS

**Dec 4 - 2pm - 9pm - Animal Waste Operators Recertification Class** - Richmond County Extension Center. Please call randy Wood for more information at 910-947-3188.

**Dec 7 - 10am - 5pm - Animal Waste Operators Recertification Class** - Robeson County Extension Center. Please call Tiffanee Acuna for more information at 910-671-3276.

**Dec 12 - 9:30am - Organic Grain Farmer Panel** - meet with organic grain buyers and farmers with experience growing organic grains. Center for Environmental Farming Systems, Goldsboro. For more info and registration go to [www.cefs.ncsu.edu/seasonsworkshop.htm](http://www.cefs.ncsu.edu/seasonsworkshop.htm)

**Dec 14 - 10:00am - 3:00pm - Spanish Herdsmen Workshop. Watch for details in the mail.**

**Dec 18 - 9am - 4pm - Animal Waste Operators Recertification Class** - Iredell Agricultural Center. Please call Ken Vaughn for more information at 704-873-0507.

**Jan 11 - 6pm - Triad Holstein Association Christmas Party** - Guilford County Ag Center, Barn Kitchen.

Guilford County's newly formed 4-H club did some great public relations work for the dairy industry at the Chatham



County Fair in September. Anna Amoriello and her 4-Hers took

their 4-H cow, Betty, and set up

a milking booth to bring their version of "culture"

- AGRiculture, that is, to the fair in

Pittsboro. More than 100 fair-

goers tried their hand at the old-

fashioned skill of

hand-milking a cow.

Young and old alike

found out it wasn't

quite as easy as it

looked, but all en-

joyed their dose of

AGRiculture!!

