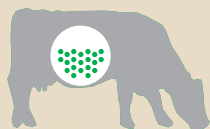


# Spruce Haven Research Farm

Auburn, NY

2006



**Levucell<sup>®</sup> SC**  
*Rumen Specific Yeast*

In November 2004, dairy producers were granted approval to feed Rumensin<sup>®</sup> (monensin) to lactating dairy cows to improve feed efficiency.

Monensin alters rumen fermentation such that fermentation end products (volatile fatty acids) are modified. It also typically results in lower feed intake, lower milk fat percentage but increases in feed efficiency.

While monensin increases feed efficiency, it comes with a "You May Notice" label warning that addresses the aspect of reduced intake and milk fat percentage.

Levucell SC, rumen specific yeast, can help dairy producers feeding monensin through a complementary mode of



action that can offset the depression in milk fat percentage while further increasing the benefits of feed efficiency. Research, in terms of milk production studies and microbial mode of action data, clearly shows that Levucell SC and monensin have a complementary effect.

This was demonstrated in a 120 cow trial coordinated by Dr. James Nocek, at Spruce Haven Research Farm, NY, in 2006.

*Ration containing*  
**Levucell SC** *rumen specific yeast had*  
*a complimentary effect with monensin,*  
*on milk yield and milk fat*



*...improvement when feeding the combination of Levucell SC and monensin....*

120 cows were divided into 3 groups of: Control; monensin (275 mg/cow/d); and Levucell SC (0.5 g SC20)+monensin. Cows received a common ration (46.6% DM, 19.1% CP, 0.80 Mcal/lb NEL, 31.2% NDF, 78.3% forage NDF, 23.4% starch, 4.3% total fat).

**Summary:**

Feed efficiency (lbs FCM/lbs DMI) indicate that there was an improvement when feeding the combination of Levucell SC and monensin. Income over feed cost, which reflects both milk income and ration costs, also showed the combination treatment highest.

	Control	Monensin	Levucell SC + Monensin
Feed Efficiency	1.79	1.83	1.89
Income Over Feed Cost	\$7.43	\$7.42	\$7.84

	Control	Monensin	Levucell SC + Monensin	P value
DMI, lbs	52.0	50.2	50.8	
Milk Yield, lbs	91.2 <sup>b</sup>	92.7 <sup>ab</sup>	95.0 <sup>a</sup>	0.10
3.5% FCM, lbs	93.2 <sup>ab</sup>	92.1 <sup>b</sup>	96.1 <sup>a</sup>	
Fat %	3.55 <sup>ab</sup>	3.46 <sup>b</sup>	3.56 <sup>ab</sup>	0.01
Fat, lbs	3.30 <sup>ab</sup>	3.21 <sup>b</sup>	3.39 <sup>a</sup>	0.05
Protein %	2.71	2.71	2.73	

- Fat corrected milk yield was significantly higher for cows consuming the Levucell SC + Monensin diet.
- The combination of Levucell SC and Monensin significantly increased milk, FCM and yields of milk protein and fat.
- The combination of Levucell SC + Monensin led to the highest numeric value of milk fat %, and significantly more lbs of milk fat.
- Protein yield was higher for cows receiving Levucell SC + Monensin.

Rumensin is a registered trademark of Elanco.

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