

## THE EFFECT OF MASS TREATMENT WITH MICOTIL®<sup>1</sup> AT ARRIVAL ON THE HEALTH AND PERFORMANCE OF LONG-HAULED CALVES

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### Summary

Long-hauled calves (n=170) were either mass-medicated with Micotil® or served as controls. Micotil reduced mortality (1.2 vs 8.1%) and morbidity (59.7 vs 75.5%), but it did not improve ADG.

(Key Words: Stocker Calves, Micotil®, Receiving Program, Shipping Fever, Health.)

### Introduction

Calves hauled long distances typically have high incidences of respiratory diseases and other health complications. Micotil (tilmicosin phosphate) is a long-acting antibiotic that has shown promise in reducing respiratory disease. Our objective was to determine if mass medication with Micotil at arrival would reduce sickness and improve gain of highly stressed, long-hauled calves.

### Experimental Procedures

One hundred and seventy, mixed breed, bull calves from Alabama averaging 294 lb were allotted randomly to either receive Micotil (4.5 ml of IM at arrival) or serve as controls. All calves were vaccinated with modified-live IBR+BVD+PI<sub>3</sub> and Blackleg (7-way), dewormed with levamisole, deloused with Lysoff®, implanted with Ralgro®, and castrated via banding. They were fed 4.5 lbs per day of a

15.5% crude protein milled ration plus prairie hay to appetite (average, 2.9 lbs).

### Results and Discussion

**Table 1. The Effect of Mass Medication of Long-Hauled Calves with Micotil® at Arrival**

Item	Treatment	
	Control	Micotil®
No. calves	85	85
Starting wt, lb	294	294
ADG, lb	1.12	1.18
Health		
Morbidity, %	75.6 <sup>a</sup>	59.7 <sup>b</sup>
Mortality, %	8.1 <sup>a</sup>	1.2 <sup>b</sup>
Treatments/animal		
Week 1	4.3	4.3
Week 2	3.9	3.1
Week 3	5.4	4.6
Week 4	4.5	5.1

<sup>a,b</sup>Means in the same row with unlike superscripts are significantly different (P<.05).

These calves were severely stressed as indicated by the level of morbidity and the number of antibiotic treatments required (Table 1). An injection of Micotil at arrival reduced both mortality (1.2 vs 8.1%; P<.05) and morbidity (59.7 vs 75.5%; P<.04). However, it did not affect the number of antibiotic injections required to treat a sick calf and did not improve ADG. An injection of Micotil to highly stressed calves at arrival should be cost effective as a result of reductions in morbidity and mortality.

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<sup>1</sup>Micotil is a registered trademark of Elanco Animal Health.

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