GAINS OF NURSING CALVES WORMED ONCE OR TWICE IN SUMMER

B.L. Peverly, K.S. Lusby, J.G. Wallace, and J. Pierce

Story in Brief

Eighty-eight nursing, spring-born purebred Brangus calves on a ranch in Craig county in Northeast Oklahoma were allotted to four worming treatments: (1) Control, no worming, (2) Wormed with TBZ at working time on 5/14/83, (3) Wormed on 7/18/83 and (4) Wormed on both 5/14/83 and 7/18/83. Dams of these calves were in excellent body condition, and grazed ample, high quality pastures of bermudagrass, fescue and clovers and were routinely wormed. Weight per day of age in mid-summer and at weaning in October was not affected by worming. These results suggest that worming of calves may not be necessary with well fed cattle herds in good body condition where the cows have been wormed.

Introduction

Routine worming of new stocker cattle is a recommended practice in Oklahoma. However, routine worming of cowherds is controversial, particularly when the herds in question are in good body condition and on an adequate plane of nutrition. The objective of this study was to evaluate the effects of worming on spring-born nursing calves under field conditions in a well managed purebred herd.

Materials and Methods

Calves used in this study were purebred Brangus and were born from 2/19/83 to 4/27/83. Males were not castrated. Forage consisted of bermudagrass overseeded with fescue and various clovers. All pastures were in good to excellent condition throughout the study and fertilization rates were equal across all pastures. The stocking rate was 3 acres per cow/calf pair.

On 5/14/83, all cows were vaccinated for vibrio and lepto and tested for TB. All cows were tagged with 2 insecticide impregnated ear tags and wormed with TBZ paste, a routine practice in this herd. Calves were injected with 7-way clostridial (blackleg) vaccine. All calves were sired by bulls with similar growth traits. All cows and calves were individually identified. Calves were divided into 4 treatment groups:

Group 1 - Control

Group 2 - Wormed with 7.5 grams of TBZ paste on 5/14/83. (Thiabendazole, product of MSD AGVet, Merek and Co., Rahway, New Jersey.)

Group 3 - Wormed with 15 grams of TBZ paste on 7/18/83.

Group 4 - Wormed with 7.5 grams of TBZ paste on 5/14/83 and wormed with 15 grams again on 7/18/83.

Area Specialized Agent 2
Associate Professor, Animal Science
Extension Agricultural Agent Owner, JP Brangus Ranch, Welch, OK

Dosages were based on body weight of the calves. Calves were weighed on 7/18/83 and on 10/12/83, the day of weaning.

Results and Discussion

Cows used in this study were in excellent body condition with condition scores of 6 and 7 on a scale of 1=very thin to 9=very fat and averaged a little over 8 years of age (Table 1). No health problems were observed with any cow or calf during the study.

No statistical advantage to worming calves was noted for any of the worming treatments. As seen in Table 1, there was little difference in the weight per day of age on 7/18/83 for calves that had been wormed in May (Groups 2 and 4) and calves that had not been wormed (Groups 1 and 3). Weight gains from July to October also were similar for Groups 1 and 2, which were not wormed in July (179 and 184 1b) and for Groups 3 and 4 which were wormed in July (175 and 183 1b). Although weight per day of age in October tended to favor Groups 2, 3 and 4, all of which had been wormed at some point, the differences were not significant. Weaning weights for the bull and heifer calves all averaged over 500 lb, indicating the high level of management in this herd. These results suggest that worming of calves may not be necessary in herds with good nutrition and management where the dams have been routinely wormed. This may not be the case when forage conditions are limiting or when cattle condition is less than adequate.

Table 1. Performance of Brangus calves wormed once or twice during the summer.

	Control	Wormed 5/14/83	Wormed 7/18/83	Wormed 5/14 & 7/18	SD
No. Calves	21	23	20	24	
Ave. Cow Age	8.3	8.3	8.2	8.8	
Wt./Day of Age					
7/18/83, 1b	2.02	2.15	2.22	2.08	. 28
Total Gain From					
7/18 to 10/12, 1b	179	184	175	183	23.3
Wt./Day of Age					
10/12/83, 1b	2.05	2.16	2.16	2.10	. 23
Calf Wt. 10/12/83	509	505	530	518	53.6