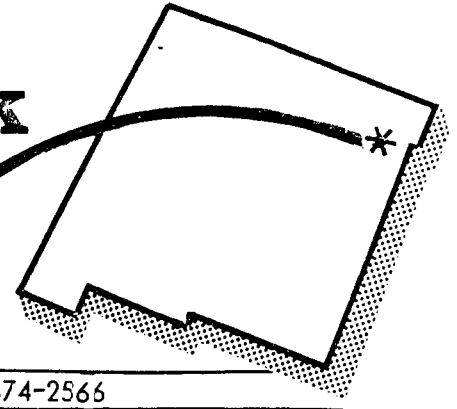




# Clayton Livestock Research Center

## PROGRESS REPORT



Route 1 Box 109 Clayton, New Mexico 88415 Tel. (505) 374-2566

Progress Report No. 42 (April, 1985)

### LONG TERM EFFECTS OF THREE PARASITE CONTROL PROGRAMS ADMINISTERED AT TIME OF PROCESSING OF NEWLY ARRIVED CALVES

Glen P. Lofgreen, Danny R. Garcia and Michael G. Shafter<sup>1</sup>

Progress Report No. 36 presented the 14, 28 and 56 day performance of calves receiving three parasite control programs at time of processing. One-third of the calves were wormed with oral Tramisol® drench at the time of processing with dipping delayed for 28 days. Another third received the oral Tramisol and were dipped (GX118®) at the time of processing. The remaining third were given an Ivermectin injection at the

time of processing replacing both the worming and dipping with Tramisol and GX118, respectively. The performance by week during the 28-day receiving period is shown in table 1. Worming and dipping on the same day caused a drop in weight gain during the first week following processing compared to worming only or treating with Ivermectin. However, the stress of being wormed and dipped at the same time was quickly overcome

Table 1. Performance during 28 day receiving period

| Item                                | Week              |                    |       |       | Entire 28 days |
|-------------------------------------|-------------------|--------------------|-------|-------|----------------|
|                                     | 1                 | 2                  | 3     | 4     |                |
| <u>Daily feed intake, lb.</u>       |                   |                    |       |       |                |
| Tramisol, delayed dip               | 5.62              | 8.03               | 10.01 | 12.43 | 9.02           |
| Tramisol and dipped                 | 5.10              | 7.24               | 10.92 | 13.47 | 9.18           |
| Ivermectin                          | 5.31              | 7.43               | 10.92 | 13.59 | 9.31           |
| <u>Daily gain from arrival, lb.</u> |                   |                    |       |       |                |
| Tramisol, delayed dip               | 4.23 <sup>b</sup> | 1.71 <sup>ab</sup> | 3.21  | 2.79  | 2.99           |
| Tramisol and dipped                 | 2.89 <sup>a</sup> | 2.30 <sup>b</sup>  | 4.08  | 2.76  | 3.01           |
| Ivermectin                          | 4.73 <sup>b</sup> | 1.10 <sup>a</sup>  | 3.79  | 3.55  | 3.29           |
| <u>Feed per pound gain, lb.</u>     |                   |                    |       |       |                |
| Tramisol, delayed dip               | 1.33              | 4.70               | 3.12  | 4.46  | 3.02           |
| Tramisol and dipped                 | 1.76              | 3.15               | 2.68  | 4.88  | 3.05           |
| Ivermectin                          | 1.12              | 6.75               | 2.88  | 3.83  | 2.83           |

<sup>a, b</sup> Means in the same column having unlike superscripts differ among treatments (P<.05).

<sup>1</sup> Present address: Frontier Feedyards, Inc., Spearman, Texas 79081

as shown by the gain made by these calves during the second week. If considerable difficulty with bovine respiratory disease is being encountered, the stress of worming and dipping on the same day may prove detrimental. During weeks three and four, no significant differences were observed.

Table 2 presents the results of the entire feeding period. For the 250-day finishing period feed intake was lowest for calves wormed and dipped on the same day. However, for the entire 278 days feed intake between these two groups was not different. No

significant effects were observed among treatments in weight gain or feed conversion.

It can be concluded from this study that worming with Tramisol liquid and dipping with GX118 on the same day caused a temporary reduction in rate of gain which may have been related to feed intake. Delaying dipping or the use of Ivermectin will prevent this depressing effect. The process of choice will depend on cost, convenience and effectiveness of the drugs in control of parasites.

Table 2. Performance by period for entire trial

|                                      | Period    |                    |                     |
|--------------------------------------|-----------|--------------------|---------------------|
|                                      | Receiving | Finishing          | Total               |
| Days in period                       | 28        | 250                | 278                 |
| <u>Daily feed intake, lb.</u>        |           |                    |                     |
| Tramisol, delayed dip                | 9.02      | 17.97 <sup>b</sup> | 17.07 <sup>ab</sup> |
| Tramisol and dipped                  | 9.18      | 17.63 <sup>a</sup> | 16.78 <sup>a</sup>  |
| Ivermectin                           | 9.31      | 18.28 <sup>b</sup> | 17.38 <sup>b</sup>  |
| <u>Daily gain from purchase, lb.</u> |           |                    |                     |
| Tramisol, delayed dip                | 1.74      | 2.66               | 2.57                |
| Tramisol and dipped                  | 1.74      | 2.60               | 2.51                |
| Ivermectin                           | 2.02      | 2.68               | 2.61                |
| <u>Feed per pound gain, lb.</u>      |           |                    |                     |
| Tramisol, delayed dip                | 5.18      | 6.76               | 6.64                |
| Tramisol and dipped                  | 5.28      | 6.78               | 6.69                |
| Ivermectin                           | 4.61      | 6.82               | 6.66                |

a, b Means within period and category having unlike superscripts differ (P<.05).

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