THE RESPONSE OF NEWLY RECEIVED CALVES TO OXYTETRACYCLINE, COMBIOTIC AND TYLAN

G. P. Lofgreen

Two hundred fifty seven calves with a mean purchase weight of approximately 350 pounds were shipped from Florida to the Clayton Livestock Research Center and were used in a study to determine the response to commonly used drugs in the treatment of shipping fever. The calves were processed off truck and were observed daily for sickness.

On the first day a calf was pulled and diagnosed as sick, he was given oxytetracycline at 10 cc per 100 lb body weight. If he responded to this drug, he was continued on it until his body temperature had been normal for two successive days or a minimum of three days treatment. If a calf did not respond to oxytetracycline after 24 hours, he was treated with combiotic (pen-strept) at 10 cc per 100 lb body weight. If he responded to this second drug, it was continued until the body temperature had been normal for two successive days. If a calf failed to respond to both oxytetracycline and combiotic, he was given tylan at a level of 1 cc per 100 pounds. This was then continued until the temperature had been normal for two successive days. If a calf did not respond to any of the three drugs, various other programs were tried or treatment discontinued entirely and the calf considered to be a chronic.

The table below shows the response to this program. In this group of calves, 61 percent got sick and required treatment. Of those requiring treatment, approximately 20 percent (or 12 percent of all calves) did not respond to oxytetracycline, combiotic or tylan treatments. Some other program must be devised to treat these difficult cases. Studies are underway to test other programs.

<table>
<thead>
<tr>
<th>Number of calves</th>
<th>257</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calves given oxytetracycline as first drug</td>
<td>159</td>
</tr>
<tr>
<td>Number responding</td>
<td>74</td>
</tr>
<tr>
<td>Percent response</td>
<td>47</td>
</tr>
<tr>
<td>Calves given combiotic as second drug</td>
<td>85</td>
</tr>
<tr>
<td>Number responding</td>
<td>25</td>
</tr>
<tr>
<td>Percent response</td>
<td>29</td>
</tr>
<tr>
<td>Calves given tylan as third drug</td>
<td>60</td>
</tr>
<tr>
<td>Number responding</td>
<td>29</td>
</tr>
<tr>
<td>Percent response</td>
<td>48</td>
</tr>
<tr>
<td>Calves not responding to any of the three drugs</td>
<td>31</td>
</tr>
<tr>
<td>Percent not responding</td>
<td>20</td>
</tr>
<tr>
<td>Death loss:</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>13</td>
</tr>
<tr>
<td>Percent</td>
<td>5.1</td>
</tr>
</tbody>
</table>
Clayton Livestock Research Center Advisory Committee

The research program at the CLRC is planned in cooperation with an industry advisory committee which meets with station personnel two or three times a year to consult on the research program. Members of the committee are: Dr. Donald Reif, chairman, Clayton; Sam Britt, Grenville; Alton Bryant, Clayton; Karl Butt, Clayton; Bill Cantrell, Clayton; Donovan Dellinger, Clayton; David Grah Des Moines; O. C. Kimble, Clayton; Bill King, Stanley; W. F. (Dub) Martin, Cimarron; John Morrow, Capulin; Allen Poling, Clayton; G. A. (Buster) Poling, Clayton; Vic Worley, Tucumcari, and Foster Zimmerman, Clayton.

Clayton Livestock Research Center Open House and Dedication
October 10, 1978

Open House

9:30-12:00 - Registration

10:00-12:00 noon - Open House: Facilities and Research in Progress

Six stations may be visited:

1. Office-Laboratory
2. Solar and Wind Energy
3. Shop and Feed Storage
4. Feed Mill (under construction)
5. Feedlot Office and Cattle Working Facilities
6. Research Cattle Pens

12:00 noon - Lunch served by Clayton Chamber of Commerce

A. B. Nelson, Head
Department of Animal and Range Sciences

Presiding
L. S. Pope, Dean and Director
College of Agriculture and Home Economics

Center Personnel and Advisory Committee
Glen P. Lofgreen, Superintendent

Clayton Livestock Research Center - The Beginning
John L. Morrow, State Senator

Clayton Livestock Research Center and the Forest Service
Alton Bryant, Kiowa National Grassland

Clayton Research - Its Impact on the Beef Cattle Industry
Phillip Bidegain, NM Cattle Growers Assoc.

Beef Research - An Investment in the Future
Gerald W. Thomas, President, NMSU

Acceptance by Board of Regents, New Mexico State University

Agricultural Experiment Station
NEW MEXICO STATE UNIVERSITY
Las Cruces, New Mexico 88003
L. S. Pope, Director
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