GROWTH RESPONSES OF BRAHMAN-CROSS STEERS ADMINISTERED WITH MONENSIN ALONE, OR IN COMBINATION WITH OESTRADIOL 17B

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The rumen modifier, monensin, has been fed to cattle in mixes of molasses, urea and/or protein meal during the dry season. Standfast et al. (1989) reviewed the literature which showed a wide variation of growth responses (0-170 g/hd/d) from rumen modifiers when used in this manner.

When steers are actively growing in the wet season, anabolic growth promotants have been shown to improve liveweight (LW) gains by 10-15% (Hodge et al. 1986).

Little information is available on the growth responses to rumen modifiers and rumen modifier/anabolic combinations used during the wet season in the absence of supplements. The experiment being reported, investigated growth responses of steers to either oestradiol 17B or monensin alone and in combination.

One hundred, forty-eight month old steers were randomly allocated to one of four treatments: Control; oestradiol 17B (Compudose 200); monensin sodium 32 g ('Anti-Bloat Capsule') (TM Elanco Products Company); oestradiol plus monensin. All treatment groups grazed the same paddock of Callide Rhodes grass (Chloris gayana). Live weights were monitored at six week intervals over a 130 day period. Statistical analysis of treatment means (Table 1) was by a 2 x 2 factorial with initial live weight as a co-variate.

Table 1   Liveweight gains of steers treated with Monensin and Oestradiol 17B alone and in combination over a 130 day period

<table>
<thead>
<tr>
<th>Treatment</th>
<th>17B</th>
<th>Alone</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>352</td>
<td>338</td>
<td>351</td>
</tr>
<tr>
<td>LW gain (kg/hd/day)</td>
<td>0.57a</td>
<td>0.65a</td>
<td>0.69b</td>
</tr>
</tbody>
</table>

Means with different superscripts differ significantly (P<0.05)

Implantation of oestradiol 17B improved growth rate either alone or with monensin. However, there was no improvement in growth attributable to monensin alone and there was no synergistic response when it was used with oestradiol 17B. Standfast (1989) states that responses to rumen modifiers have been poor in cattle grazing native pastures without supplements. The results achieved in this experiment show similar results.


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