

EFFECT OF AVOPARCIN ON GROWTH RATE IN GRAZING BEEF CATTLE WEANERS  
IN THE DRY SEASON IN NORTHERN AUSTRALIA

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Avoparcin (Avotan<sup>®</sup> 100, American Cyanamid Company) is used as an in-feed growth promotant under lot feeding conditions in beef cattle in Europe. To ascertain whether improved growth rates would occur under grazing conditions in Australia, pen trials and paddock trials were conducted.

Avoparcin was administered following mechanical mixing at the appropriate rate into supplements which were offered ad libitum to beef cattle weaners fed pasture hay in pens or grazed on pasture in paddocks. The supplements used as a vehicle to supply Avoparcin included molasses (Mol) alone or with 3% or 8% urea (M3U or M8U), cottonseed meal (CSM) and protected protein in the form of formaldehyde-treated cottonseed meal plus 12% urea (UPP). The allowance of Avoparcin is expressed as mg per head per day (mg/hd/d), the growth rate is expressed as average daily gain (ADG), and the average daily feed consumption is expressed as average feed intake (AFI).

Table 1. Average daily gains and average feed intakes in steers given Avoparcin in various supplements.

Trial type & No.	Animals/ treatment	Supplement used	AFI (kg/d)	Avoparcin (mg/hd/d)	Initial liveweight (kg)	ADG(g), Increase with control	Increase with Avoparcin
Pen176	12	M3U	4.02	75	180	294	75
	12			135		294	25
	12			160		294	92
	8			270		294	149
	8			390		294	114
Pen177	16	Mol	3.67	150	187	56	74*
Pen208	8	M8U	2.43	150	148	-11	158*
	8	UPP	2.39	150	149	51	117*
Pen211	10	CSM	4.29	200	175	176	125*
Pdk209	9	M8U		150	177	384	81
	9	M8U		250	177	384	52
	9	UPP		200	176	425	97*
Pdk210	50	M8U		150	168	118	141*
	50	Mol + 22% CSM		150	198	831	98*

\* P<0.05 when compared with control group.

Although not all differences in growth rate were statistically significant, when compared with control group, there was a positive response to Avoparcin in all studies undertaken, with improvements in average daily gain of at least 9%. Feed intakes did not vary consistently or significantly between the Avoparcin groups and their respective controls. These results demonstrate that grazing beef cattle weaners growing at various rates will respond favourably to Avoparcin taken at between 75 and 390 mg per head per day.

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