A PRODUCTION SYSTEM FOR BEEF FROM YOUNG *BOS INDICUS* CROSSBRED HEIFERS

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The adoption of new breeder management technology such as early weaning and supplementary feeding in northern Queensland has meant that weaning rates and breeder survival rates have increased. Consequently, more heifers are surplus to requirements for breeder replacement.

A system to utilise surplus pregnant heifers was devised. Groups of forty, three year-old Brahman crossbred heifers were calved down and the calves, when aged three months, were early weaned in March 1994 and 1995. The cow-heifers were next grazed for two months and then any weighing more than 440 kg liveweight were sent to the meatworks. The remaining were paddock finished on a molasses production supplement (w/w molasses 100, urea 3, cottonseed meal 10, plus monensin and minerals and vitamins). The results are shown in Table 1.

Table 1. Carcass data from Brahman crossbred heifers on two finishing systems

	Pasture only	Pasture plus molasses mixture	s.e.
Experiment 1 (1994)			
Slaughter date	17 May	17 August	
Carcass weight	208[a]	225[b]	3.05
P8 fat depth (mm)	8.5[a]	12.9[b]	0.77
Experiment 2 (1995)			
Slaughter date	25 May	7 September	
Carcass weight (kg)	207[a]	218[b]	3.14
P8 fat depth (mm)	9.0[a]	14.5[b]	0.81

Within row values followed by different letters are significantly different at $P<0.05$

The heifers which were slaughtered in May had a mean carcass weight of 208 kg. All these cattle had six teeth or less and 70% of carcasses were greater than 200 kg.

The molasses production-fed heifers gained 70 kg during feeding and final carcass weight was significantly heavier than the pasture alone animals. All carcasses were at least 200 kg and 85% of the heifers had six teeth or less. There was significant increase in P8 fat depth in the supplemented heifers compared with the other group.

These data have shown that heifers which are surplus to requirements for breeder replacement can be used to produce a calf and a young, heifer beef carcass. This molasses production supplementation system is also a useful technology to finish lighter weight cow-heifers and yield heavier weight carcasses.