

Drylot weaned calves at dry-to-rainy transition and rainy season and their effects on the growing phase

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Introduction and Objective

The animal historic can influence in the subsequent phase of beef cattle growth. Beside this, forage allowance is different among seasons. The objective of this study was to determine the best nutritional strategy for weaned calves at dry-to-rainy transition and rainy season and their effects on the growing phase.

Material and Methods

- 116 Nellore weaned males (173 ± 23 kg; 10 months);
- Randomized complete block design (blocked by BW) in a 2 × 2 factorial arrangement of treatments;
- 12 lots with 9 or 10 animals/lot.
- The experiment lasted 244 days.
- Data were analyzed using the PROC MIXED of SAS.



Results

Table 1. Performance of growing Nellore cattle fed different strategies at dry-to-rainy transition and rainy season.

Transition season	Pasture		Drylot		SEM	P-value		
	MS	PEII	MS	PEII		Transition	Rainy	Transition × Rainy
Period I (Transition)								
Initial BW, kg	173		173		14.9	-	-	-
Final BW, kg	206		220		18.0	<0.01	-	-
ADG, kg/d	0.536		0.757		0.054	<0.01	-	-
Period II (Rainy)								
Initial BW, kg	207	206	221	220	18.1	<0.01	0.691	0.972
Final BW, kg	321	360	322	362	20.5	0.788	<0.01	0.976
ADG, kg/d	0.632	0.850	0.559	0.783	0.02	<0.01	<0.01	0.832
Overall growing phase								
Final HCW, kg	165	189	164	190	11.3	0.930	<0.01	0.799
Carcass gain, kg/d	0.303	0.400	0.296	0.403	0.020	0.922	<0.01	0.772

Conclusion

Regardless the strategy used in the dry-to-rainy season transition, animals were able to equalize final BW at the end of growing phase. In addition, protein-energy supplement strategy at rainy season improves animal performance at the end of growing phase.

Pasture
(5 g/kg BW)

Drylot
(5 g/kg BW)

Mineral salt
(ad libitum)

protein-energy
supplement
(3 g/kg BW)

Mineral salt
(ad libitum)

protein-energy
supplement
(3 g/kg BW)