## PREWEANING PERFORMANCE OF CALVES OF BRAHMAN CROSS COWS SIRED WITH WAGYU AND BELGIAN BLUE BULLS

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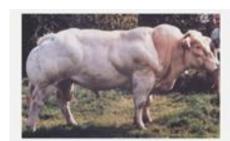
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## **OBJECTIVES**

This study was conducted to observe the preweaning growth performance of calves of Brahman Cross cows sired with

Wagyu and Belgian Blue bulls.



















- Eighty heads of Brahman Cross cows were divided into three groups.
- The first group was artificially inseminated with Belgian Blue bulls
- The second group was artificially inseminated with Wagyu bulls
- The third group was naturally mated with Brahman Cross bull
- The calves were raised together with their dams until they reached their weaning age, i.e. six months old
- The data collected was analyzed by one way analysis of variance



## **RESULTS**

**Table 1.** Body weight and size of calves

Variable	Breed	Age (day)				
		0	60	120	180	
Body weight (kg)						
	BBBxBX	32.17±5.17	78.19±10.67 <sup>a</sup>	115.81±15.61 <sup>b</sup>	164.71±20.77 <sup>c</sup>	
	WagyuxBX	29.15±10.95	67.19±6.85 <sup>b</sup>	104.55±11.44 <sup>b</sup>	141.60±11.32 <sup>b</sup>	
	BXxBX	28.20±6.52	56.23±10.45°	76.99±16.31ª	98.42±19.94ª	
Body leng	th (cm)					
	BBBxBX	63.50±3.90	69.64±4.37 <sup>b</sup>	82.02±4.34 <sup>b</sup>	89.91±3.57 <sup>b</sup>	
	WagyuxBX	59.31±9.61	71.53±4.92 <sup>b</sup>	79.28±7.80 <sup>ab</sup>	89.73±10.03 <sup>b</sup>	
	BXxBX	58.93±6.43	64.31±5.31 <sup>a</sup>	74.21±7.39 <sup>a</sup>	79.20±6.87ª	
Withers h	eight (cm)					
	BBBxBX	69.38±3.77ª	81.05±3.65	91.24±3.59	99.87±4.02 <sup>b</sup>	
	WagyuxBX	70.00±6.95 <sup>ab</sup>	82.17±2.75	90.97±6.64	94.99±7.70 <sup>ab</sup>	
	BXxBX	73.87±4.73 <sup>b</sup>	81.39±3.61	88.25±4.29	92.30±4.20 <sup>a</sup>	
Heart girt	h (cm)					
	BBBxBX	72.08±4.38	99.85±6.97 <sup>b</sup>	113.37±6.86 <sup>c</sup>	128.42±6.73 <sup>c</sup>	
	WagyuxBX	71.54±8.66	91.83±3.29ª	104.88±6.66 <sup>b</sup>	114.85±6.79 <sup>b</sup>	
	BXxBX	74.67±6.80	89.64±6.07ª	96.12±7.09ª	103.24±5.66ª	

Table 2. Body weight and size gain of calves

Variable	Breed	Age (60 days)				
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	total	
Body weig	ght (kg/day)					
	BBBxBX	0.77±0.22 <sup>b</sup>	0.63±0.11 <sup>b</sup>	0.82±0.16 <sup>c</sup>	0.74±0.13°	
	WagyuxBX	0.63±0.17 <sup>b</sup>	0.62±0.22 <sup>b</sup>	0.62±0.15 <sup>b</sup>	0.62±0.06 <sup>b</sup>	
	BXxBX	0.47±0.17 <sup>a</sup>	0.35±0.13 <sup>a</sup>	0.36±0.16 <sup>a</sup>	0.39±0.11ª	
Body leng	th (cm/day)					
	BBBxBX	0.10±0.12 <sup>a</sup>	0.21±0.06	0.13±0.04 <sup>ab</sup>	0.15±0.03 <sup>b</sup>	
	WagyuxBX	0.20±0.13 <sup>b</sup>	0.13±0.12	0.17±0.10 <sup>b</sup>	0.17±0.03 <sup>b</sup>	
	BXxBX	0.09±0.07 <sup>a</sup>	0.17±0.13	0.08±0.08 <sup>a</sup>	0.11±0.03°	
Withers h (cm/day)	eight					
	BBBxBX	0.21±0.08 <sup>b</sup>	0.17±0.05 <sup>b</sup>	0.14±0.03 <sup>b</sup>	0.18±0.02 <sup>c</sup>	
	WagyuxBX	0.20±0.08 <sup>b</sup>	0.15±0.08 <sup>ab</sup>	0.07±0.07 <sup>a</sup>	0.14±0.02 <sup>b</sup>	
	BXxBX	0.13±0.04 <sup>a</sup>	0.11±0.05 <sup>a</sup>	0.07±0.04 <sup>a</sup>	0.10±0.02°	
Heart girt	h (cm/day)					
	BBBxBX	0.47±0.15 <sup>b</sup>	0.23±0.05 <sup>b</sup>	0.25±0.04 <sup>b</sup>	0.32±0.05 <sup>c</sup>	
	WagyuxBX	0.34±0.11 <sup>a</sup>	0.22±0.09 <sup>b</sup>	0.17±0.06 <sup>a</sup>	0.24±0.03 <sup>b</sup>	
	BXxBX	0.25±0.08 <sup>a</sup>	0.11±0.06 <sup>a</sup>	0.12±0.08 <sup>a</sup>	0.16±0.03ª	



## CONCLUSION

It is concluded that crossing Brahman Cross cows with Belgian Blue and Wagyu bulls improves body size and weight gain of calves and crossing with Belgian Blue bull give better improvement than that with Wagyu bull.