

Belgian breeds

Belgian Blue Cattle



Pietrain pig



Belgian Texel Sheep



Ardennaise Poultry breed



Ardennes Horse



Belgian Blue cattle



Belgian Blue cattle



Belgian Blue cattle



7th rib

Copyright nutrition



Filet



Growth and carcass performances of Belgian Blue x Nelore and Braford cattle in Bahia State Brazil

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1. Introduction

36 Belgian Blue x Nelore cross (BBB x Nelore) were compared to 54 Braford on the AgriBahia Fazenda Lagoa do Morro (GES), Bahia State, Brazil.

Nelore cows were inseminated with 2 Belgian Blue Bulls belonging to the Company: Belgian Blue Group. Braford animals were already kept on the same farm. Calving was normal without assistance for all cows.

During the last three months of fattening, animals got a complementation base on rice by products (1% of live weight)

2. Results - Growth

The average daily gain was 938.5 g/d (926.0 g/d for the BBB x Nelore, 948.7 g/d for the Braford) before 300 days and lower afterward due to a strong dry period reducing the total daily gain (on average 740.9 g from birth to slaughter).

10 BBB x Nelore steers and 10 Braford steers were slaughtered at an average of 25 months (BBBxNelore 755 days, Braford 750 days)

3. Results - Slaughter and Dissection

Average live weight, carcass weight and killing out% were respectively 553.5 Kg, 286.6 Kg and 51.8% for the Braford. Corresponding values were 539.7 Kg, 292.0 Kg and 54.1% for the BBB x Nelore cross having, on average, lower live weight (-13.8 Kg), heavier carcasses (+5.4 Kg) and a higher value of killing out% (+2.3%).

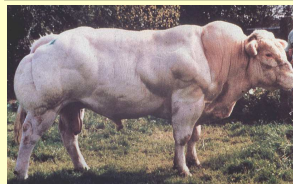
The 7th right rib from each of the 20 steers, taken one day after slaughter, were dissected. Measured values of fat, meat and bone and also the weight of Longissimus Dorsi, Trapezius and Latissimus Dorsi revealed that **BBB x Nelore bulls had 109.7 g less fat (-14.22%), 264 g less bone (-21.94%) and 386 g more meat (+19.15%) in the 7th rib in comparison to Braford bulls.**

Corresponding values computed on the total weight of the 7th rib were -2.54%, -6.90% and +9.44%.

4. Conclusion

Belgian Blue x Zebu Nelore crosses were born without assistance, can survive in very dry conditions, have higher dressing out percentages than Braford with carcasses characterized by less fat, less bone and more meat. Belgian Blue is thus suggested to increase meat production in Brazil.

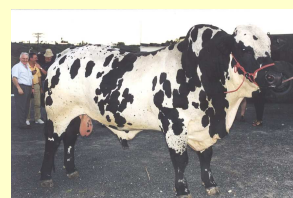
Belgian Blue



Zebu Nelore



Aladin BN Das Reunidas,
BBB x Nelore, 39 months: 1240 Kg



Typical Braford 7th rib



Typical Belgian Blue x Nelore 7th rib



BBB x Nelore: 7th rib +386 g of muscle (+19.15%), 264 g less bone (-21.9%) and 109.7 g less fat (-14.2%), Longissimus dorsi +47.5 g (+22%)

Belgian Blue x Nelore
240 Kg at 7 months



Belgian Blue x Nelore
540 Kg at 25 months



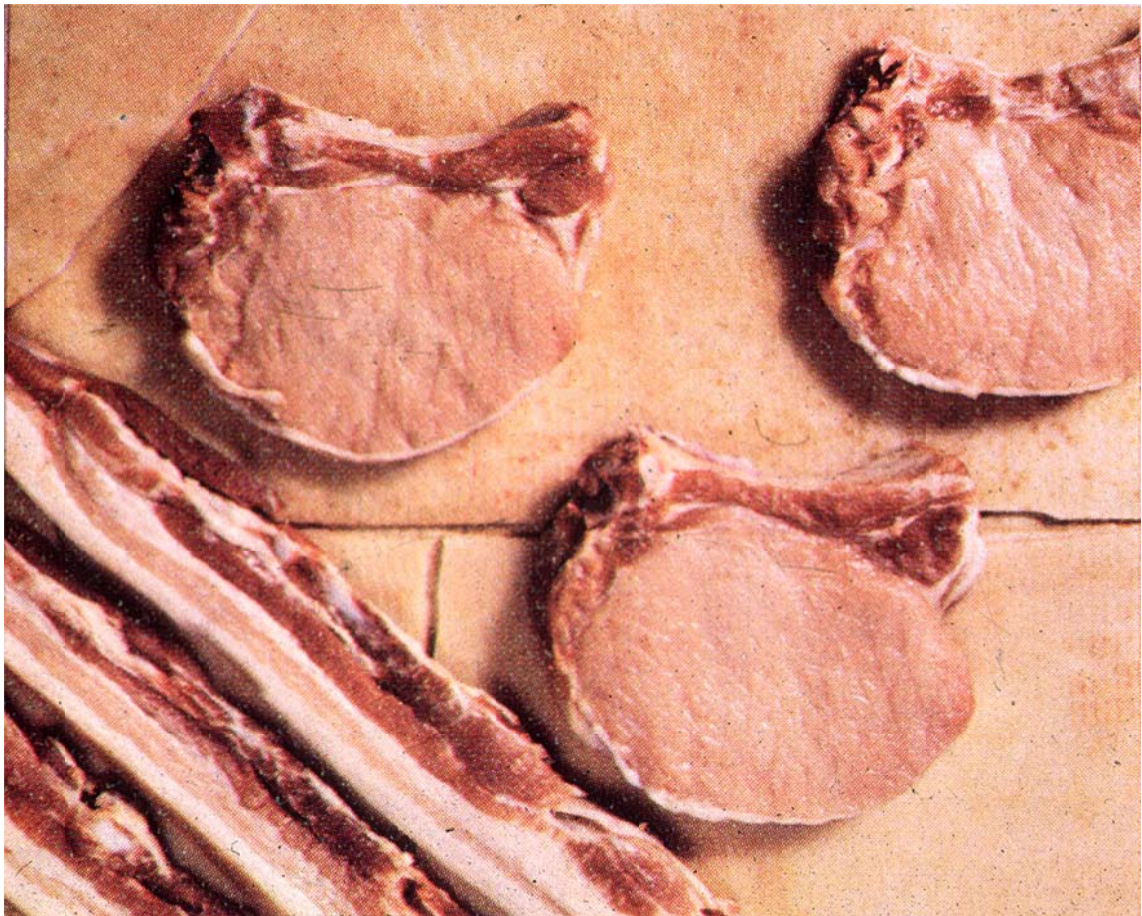
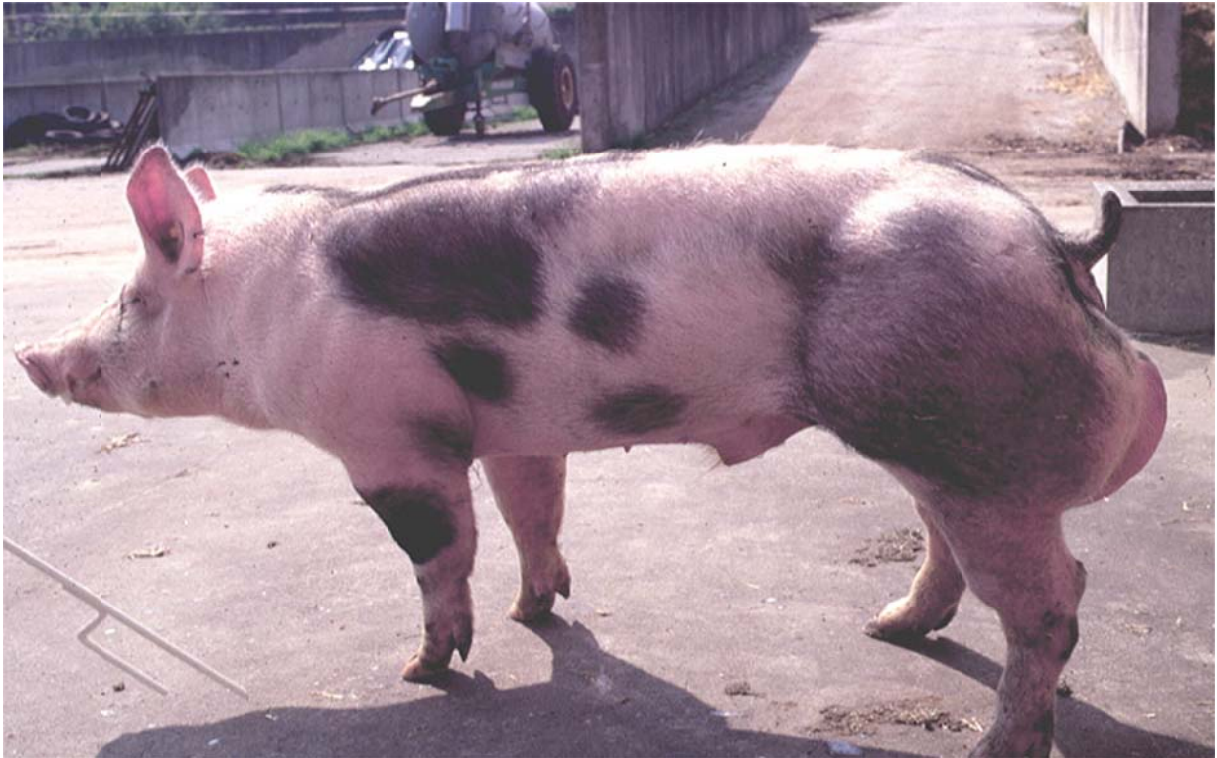
Zebu Nelore (Brazil)



Aladin, Belgina Blue x Nelore, 1240 Kg at 39 month



Pietrain Pig



Introduction

Stress negative Piétrain pig (Piétrain) was developed by the University of Liège (ULg), Belgium. Since 2007, they have been raised under tropical conditions in North Vietnam; the project is supported by the "Commission Universitaire pour le Développement" (CUD), FVM-ULg and Hanoi University of Agriculture (HUA). The Piétrain boar is used not only as a terminal boar but also as a genetic resource for the production of hybrid boars with Duroc. The objective of this study is to evaluate the growth performance and semen quality of stress negative Piétrain boars and their hybrids in the North of Vietnam.

Material and Method

A total of 15 boars from 3 genetic groups were used for this study, including 5 Piétrain boars (purebred *Piétrain*), 5 ♂Duroc × ♂Piétrain ($\frac{1}{2}$ *Piétrain*) and 5 ♀(Piétrain × Duroc) × ♂Duroc ($\frac{1}{4}$ *Piétrain*). Testing period started at an average age of 60 days and ended at an average age of 225 days. The **growth performance** was weights at starting (*W at 2 months*) and finishing (*W at 7.5 month*) periods, average daily gain (ADG), backfat thickness, longissimus depth and lean content. The **semen quality** was assessed using ejaculate volume (V), spermatozoon motility (A), sperm concentration (C), total number of spermatozoon in the ejaculate (VC), rate of abnormal spermatozoon (R) and pH of semen (pH). All these measurements were used to compare the genetic groups.

Results and Discussion

Variable	Piétrain		$\frac{1}{2}$ Piétrain		$\frac{1}{4}$ Piétrain	
	Mean	SD	Mean	SD	Mean	SD
W at 2 month (kg)	17.78	1.54	18.18	3.10	15.54	3.11
W at 7.5 month (kg)	112.95	7.11	114.50	10.00	116.20	10.53
ADG (g)	571.53	33.86	673.80	49.14	615.80	68.11
Backfat (mm)	8.92	1.01	9.24	1.26	10.70	2.89
Longissimus depth (mm)	60.94 ^a	4.92	55.10 ^{ab}	4.78	52.94 ^b	3.17
Lean content (%)	64.42 ^a	0.80	62.74 ^{ab}	1.26	60.69 ^b	2.97

Means followed by different letters within the rows are significantly different ($P < 0.05$)



Variable	Piétrain			$\frac{1}{2}$ Piétrain			$\frac{1}{4}$ Piétrain		
	n	Mean	SD	n	Mean	SD	n	Mean	SD
V (ml)	83	264.94 ^a	79.67	40	256.50 ^a	57.77	25	214.40 ^b	67.33
A (%)	83	79.88 ^a	6.72	40	75.50 ^b	6.68	25	75.40 ^b	6.44
C ($\times 10^6$ spz/ml)	83	423.02 ^a	136.75	40	562.85 ^b	233.10	25	650.60 ^c	212.65
VC (10^9)	83	110.68 ^a	45.03	40	146.33 ^b	67.49	25	133.29 ^{ab}	46.50
R (%)	75	5.58	2.37	38	6.13	3.05	24	5.11	3.71
pH	74	7.31 ^a	0.24	39	7.35 ^{ab}	0.25	23	7.44 ^b	0.23

Means followed by different letters within the rows are significantly different ($P < 0.05$)

Conclusion

- The average daily gain of stress negative Piétrain boar purebred was not significantly different from Piétrain hybrids while the lean content is higher.
- The semen volume and the spermatozoon motility of stress negative Piétrain purebred boars were higher than Piétrain hybrids but the sperm concentration and the total number of spermatozoon in the ejaculate were lower.

Texel Double Muscled



Ardenne Poultry



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Introduction

Local Moroccan breeds are characterized by their low growth rate, poor conformation and had a tendency to deposit more fat under intensive management conditions. In terminal crossing the utilization of improved meat sires which promotes rapid lamb growth, delayed fat development and improved carcass conformation can enhance quantitative and qualitative meat sheep production and meet the preference of consumers. The Belgian Texel breed which is known for its ability to produce higher meat quality can be considered in crossbreeding to improve sheep meat quality in Morocco.

Animals

An experiment was carried by INRA Morocco in order to evaluate the performances of Belgian Texel (BT) rams and their progeny when mated to Moroccan local breed ewes. Three BT rams were mated to Timahdite (T=30) and D'man x Timahdite (DT=30) ewes and compared to purebred ewes D'man (D=22) and (T=30) for ewe and lamb pre-weaning and fattening traits.



Results

Traits	D'man	Timahdite	Texel x T	Texel x DT
Fertility (%)	77 ^a	94 ^b	92 ^b	91 ^b
Litter size at weaning (lambs)	2.22 ^a	1.11 ^b	1.19 ^b	1.74 ^c
Productivity (kg/ewe)	17.12^a	20.78^a	24.67^b	27.41^c
Survival at birth (%)	87 ^a	98 ^b	96 ^b	91 ^{ba}
Survival to 90 days (%)	65 ^a	89 ^b	88 ^b	85 ^b
Birth weight (kg)	2.89 ^a	3.14 ^a	3.60 ^b	3.45 ^b
ADG 10-30 (g/day)	131 ^a	144 ^a	165 ^b	183 ^b
ADG 30-90 (g/day)	142 ^a	149 ^a	173 ^b	187 ^b
Weaning weight (kg)	15.21 ^a	16.2 ^a	19.45 ^b	19.27 ^b
Fattening daily gain (g/day)	207	211	226	225
Conversion index	6.39 ^a	5.14 ^b	4.91 ^b	5.22 ^b

Conclusion

Ewes mated to Belgian Texel rams showed higher fertility (91%) and productivity at weaning (27.41kg or +7 Kg). Lambs sired by the BT rams had survival rate at birth (93%), and superior weaning weight (+3 kg), ADG10-30 (+42g/d) and ADG30-90 (+25 g/d). Furthermore crossed lambs had higher fattening ADG (225 g/d), less DM intake (1.06 kg) and better conversion feed rate (5.20) when compared to purebred lambs D and T. These results indicate that Belgian Texel rams and their progeny have well performed under Moroccan management conditions.



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