Un ranch au coeur de la RDC; le pari fou de GoCongo

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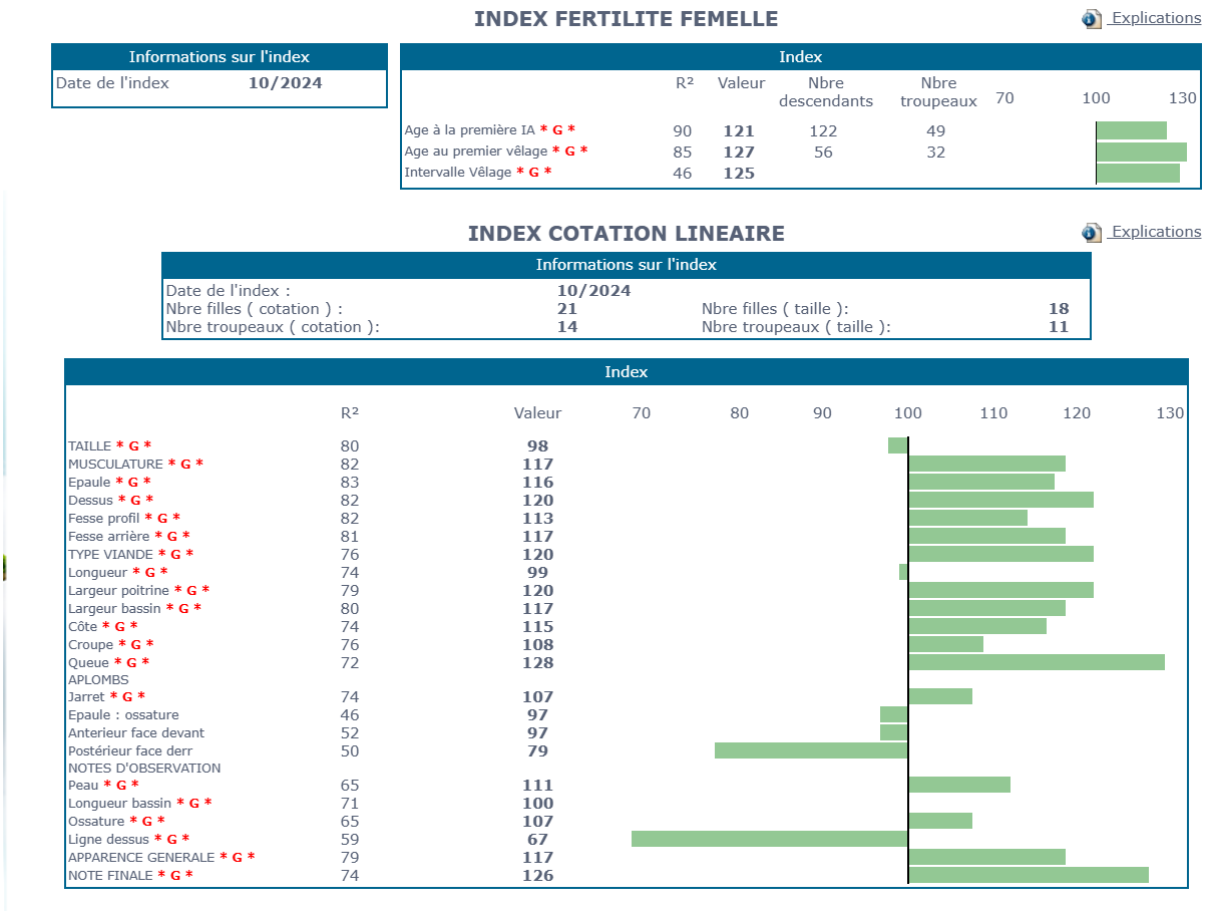
1) Bulls' selection

Is it not possible to get more precise on the bulls you choose to breed your cows, other than videos ?

We have in EU data for every ai bulls (weights, hight, birth weight, …), and we have indexes that were made regarding their offspring's performances. It reduces the riscs of having a good lookingg bull who's not performing well, because those idexes are calculated with more than 100 of their descendants.

Ex :



INDEX FERTILITE FEMELLE — Explications

Informations sur l'index	
Date de l'index	10/2024

Index	R²	Valeur	Nbre descendants	Nbre troupeaux
Age à la première IA * G *	90	121	122	49
Age au premier vêlage * G *	85	127	56	32
Intervalle Vêlage * G *	46	125		

INDEX COTATION LINEAIRE — Explications

Informations sur l'index			
Date de l'index :	10/2024		
Nbre filles (cotation) :	21	Nbre filles (taille):	18
Nbre troupeaux (cotation):	14	Nbre troupeaux (taille):	11

Index	R²	Valeur
TAILLE * G *	80	98
MUSCULATURE * G *	82	117
Epaule * G *	83	116
Dessus * G *	82	120
Fesse profil * G *	82	113
Fesse arrière * G *	81	117
TYPE VIANDE * G *	76	120
Longueur * G *	74	99
Largeur poitrine * G *	79	120
Largeur bassin * G *	80	117
Côte * G *	74	115
Croupe * G *	76	108
Queue * G *	72	128
APLOMBS		
Jarret * G *	74	107
Epaule : ossature	46	97
Anterieur face devant	52	97
Postérieur face derr	50	79
NOTES D'OBSERVATION		
Peau * G *	65	111
Longueur bassin * G *	71	100
Ossature * G *	65	107
Ligne dessus * G *	59	67
APPARENCE GENERALE * G *	79	117
NOTE FINALE * G *	74	126

This tool could prevent from having a whole herd of cows with a bad offspring, and it would help you to select the criteria that you want precisely. (Age at first ai, weight at birth, ADWG for the males, …).

2) Calves' deworming

-Arriving at 8 o'clock after a 7 km walk (little calves already tired).

-The calves were between 0-6 months old, with diffrent weights obviously.

-Students had the drug and the seringe and were told to proceed, but the explanations were poor.

It's pointless to deworm the younger calves because they're not carrying worm yet, or just a little bit (they only drink milk for the first few weeks and start eating a serious amount of grass between 2-3 months). I wouldn't deworm them before their second month, here, half of the calves were under 3 weeks. It's a waiste of drug, time, and it increases the risc of worm resistance appearance.

The fact that they had to spend the early morning walking and that we spent the rest of it running after them tired them a lot. The younger ones were really weak at noon.

I would suggest to build a few holding pens near every kraal hopital, to bring the cattle with wich the crew is suppose to work the night before.

The journey to the Kraal would be less stressful and the work could start earlier in the morning, when it's cooler. The cattle would then have more time to graze afterwards. Everybody wins.

The amount of drugs that each calve is suppose to recieve has to be related to it's weight, and the « vet Dr. » told me they knew about it. But practically, every calve recieved a 4ml dose, but that's only enough for 50 kg calves. A lot of the calves were heavier than that. This will lead to worm resistances.

3) Coaching poeple on the scanner.

-The head of sections were 3 and interns attended the class.

-The scanner and the screen were working, we used both of them.

By looking at them using the scanner, I reallised that they were bad at finding the uterus properly. The anatomical basics were not clear for all of them, and I'm sure they didn't practice much during their studies.

To make it clearer for them, i would start to show them a proper uterus from a dead animal, that they could play with in their hands and realise what they are looking for when they put their arm in the rectum.

Then, I would train them on cows in heat, so that the uterin horns are hard, and they find them easily. From there, they would have to train on cows at all stages of pregnancy.

When they are confortable with their hands, they can start with the scanner. A simple way to check if they are any good at it, is by using the screen connected to the scanner to be sure they don't lie or tell you they feel a calf when it's the rumen…

Another tip for these classes would be to train them separately and with no interns, they wouldn't been treathend by failing at the beginning.

Praticing every week for a few month would also increase their level

« First rule ; practice as much as possible.

Second rule ; to be able to confirm that a cow is pregnant, you have to see a pregnant uterus, and to confirm that it's empty, you have to see an empty uterus. Seeing or feeling nothing doesn't mean anything. »

4) The heifers' rejections

-First calvers rejects their calves more than the other cows, especially the ones from year 2018. A lot of rejections keep happening during this period.

The 2 heifer herds I saw contained aproximately around 200-220 heifers each. The weight, the condition and the health were looking good. They started to calve a week prior my visit (17/11), and a few calve died due to their mother's rejection already.

I realised that the herd had to walk the same distance as usual during the calving period (10-12 km daily), and that the fact that the heard was big and that the younger and lighter calves were slower, and sometimes a couple of meters away from the herd, was stressing the new mothers.

In fact, they would shout and look after their calve, but once the herd is moving, they would direcly move with it, wheter the calve joins or not.

The fact that they are experiencing a new and strange event and the fact that the herd moves without them stresses them.

Finally, the crowded and muddy holding pen during the night doesn't help. If 2-3 other animals come to lick the calf and disturb the mother and it's calve, might also lead to rejections.

My irish friends' trial was to put the heifers ready to calve in smaller groupes (10-15), approximately one week before the calving. He let them in a small separate paddock, in wich they couldn't see the rest of the main herd.

They would then calve there, in this quite area and spend a couple of days in it. Afterwards, they would join the main herd again, in it's rotational grazing system. His number of rejection dropped straight away.

What I would try in our case, is to build a large holding pen (100-50m), close by a water source and with a small pasture nearby. The heifers would joint this herd 7-10 days before the calving and leave it 3-5 days after it. They would be between 10-20 and wouldn't be in a compact and durty area for the night, and they wouldn't move much during the day to drink and graze.

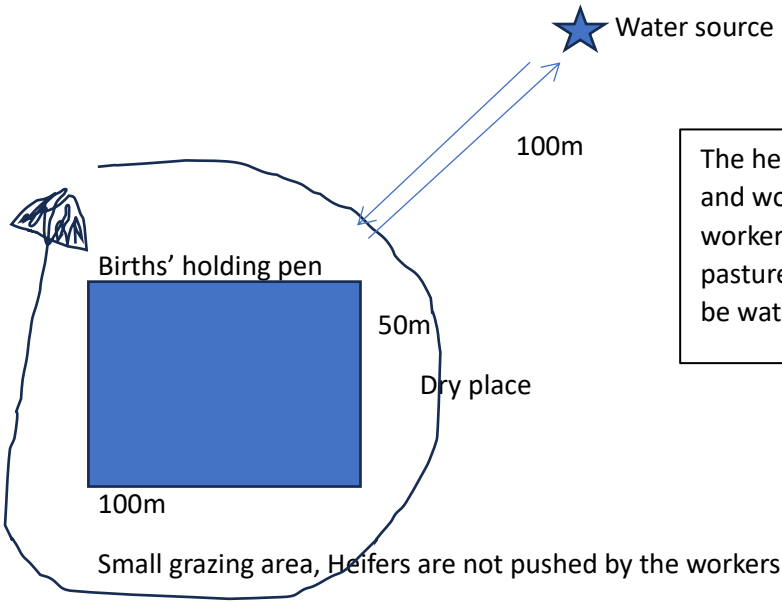
Ex ;

Main herd's holding pen and grazing area.

Small distance between the

Water source and the

pen



The heifers would live in a small area and would not be pushed by the workers to go and graze on further pastures. They would just require to be watched after.

Small grazing area, Heifers are not pushed by the workers to walk.

- If this seems too complicated, you could divide the herd in 2-3 groups of 70-80 animals. Having smaller herds could reduce the young mothers' stress.
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5) Insemination program

The logistics around those inseminations could be improved.

The plan is to store the semen in Mutobwe's head of section house. There would be 10 herds of 200 heads in this section. The 3 inseminators would have to start their day by filling up their small tank and travel between the herds on bikes. This would happen every morning and every evening, twice a day.

The bikes are rented for 18 000 francs/day for 2 months. Wich means that the transport would cost 3 240 000 francs, or 1137$.

Moreover, the inseminators would loose a lot of time every round between the Kraals, and the straws would get several temperature changes, wich is very bad for it's conservation and ability to produce a calf. In fact, they would get one temperature change at the head of section house, another during the transport and insemination of other cows, and finally, when it's taken out of the tank to defreeze.

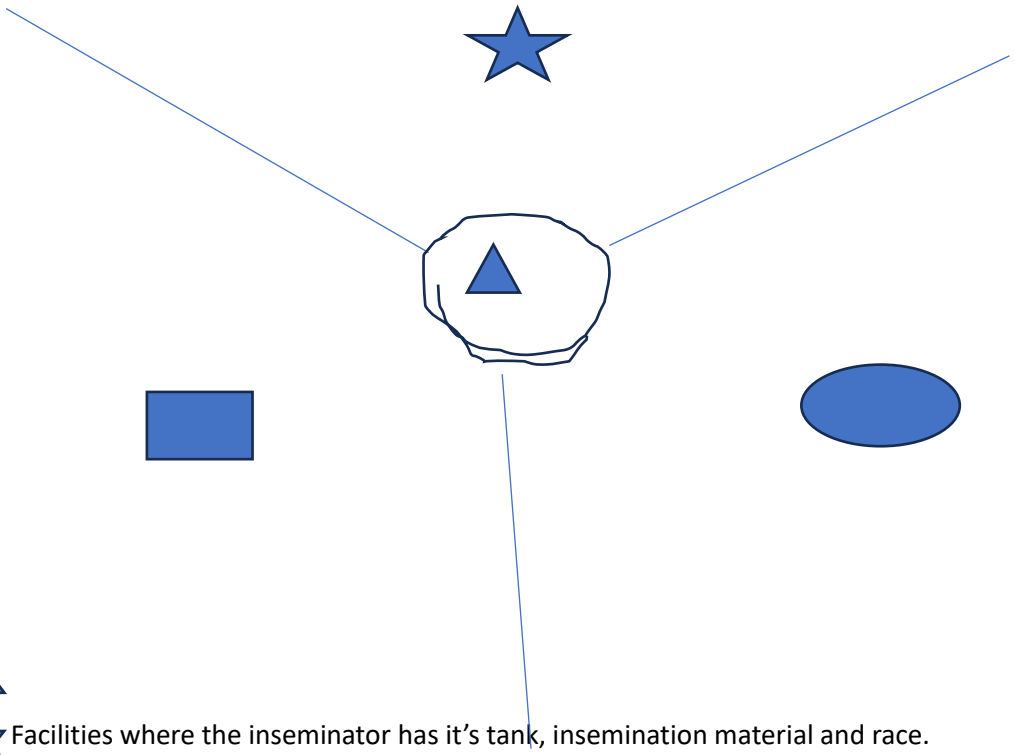
This system will also increase the risc of loosing straws and time during the transports, but it will also consume a lot of liquid nitrogen due to the several openings of the few tanks.

The last problem of this system is the fact that 10 (number of herds) can't be divided by 3, wich means that one inseminator will have an extra flock to look after. (The more it takes to inseminate the cows, the less they are going to spend time in the pastures eating and resting)

An alternative to this process, would be to gather the herds around the tanks. Each inseminator would have one facility, one tank and 3 herds of 222 heads. Each inseminator would be dropped at their spot at 6 am (This could allow us to rent only one bike for them 3, and spare 758$) and at 5 pm. They would go through each herd one by one and then release it. This way, the straws never move and the technicians spend more time on the ground watching after the cattle.

The fact that we keep it 3 herds of 222 rather than one of 666 is to prevent competition during the grazing time and to keep it simple for the staff spotting the heats.

Here is an example of this infrastructure ;



Facilities where the inseminator has it's tank, insemination material and race.

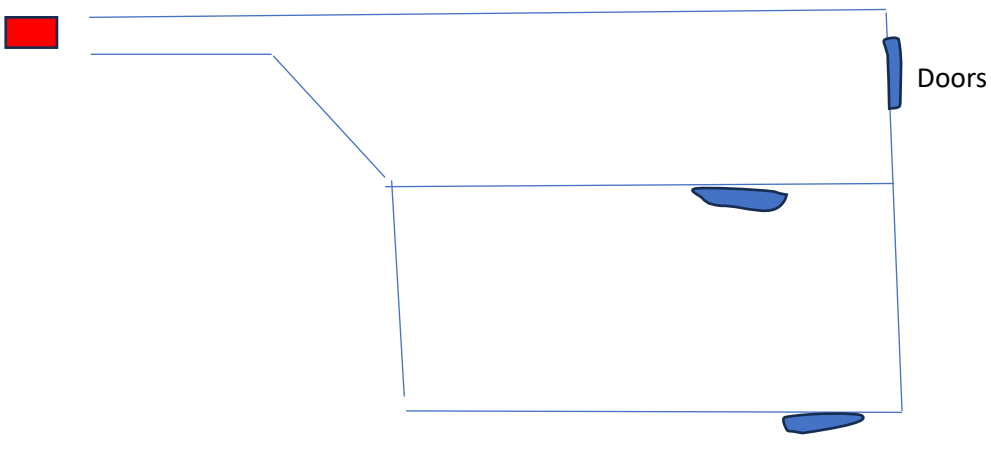
Herd 1, with one holding pen for the night and it's own pastures

Herd 2, with one holding pen for the night and it's own pastures

Herd 3, with one holding pen for the night and it's own pastures.

-I also suggested to build a second holding pen near the insemination facilities were they inseminate 2 herds. Otherwise, the two groups of cows coming from diffrent herds would mix in the insemination pen, and the workers had to sort them out after,, by running after them for 20-30 min.

By doing this, you would put one herd in a pen, strat working with it gently, and the second group would wait in another one. When you are finished, you wait another 5 min so that the first group walks away, en then you start working on the second group.



6) Hospital managment

- The culling has to be rougher and quicker :

2021 heifer weighting +/- 200 kg, with respiratory problems, treated for 10 days and no results.

This kind of animal is never going to make it into the breeding herd, and won't be able to attend the trek to Biano. The only solution is to kill it as quick as possible, to prevent it's desease to spread in the young calves. I not even sure that it is worthwhile trying to treat it due to the fact that it's already small and problematic even before it's respiratory problems.

Cows with bad udders, who were not able to feed their calves, are kept in the hospital for months (I saw one who calved in july whilst I was at Grelka).

Some of them have big wounds that healed and are still in the herd untill they start getting fatter. This takes months. I would return them quicker to their Kraals or, if it's not able to follow their herd due to it's healed wound, I would kill them (a cow had a hoof cut in two pieces, it was healed for months but still remained painful).

This quicker culling will spare drugs, space in the pens and time. The vets would then spend more time looking after the animals in real need of medical care.

- A few animals were suffering from hoof abces, and were given antibiotics. This is not enough to treat such a hoof problem, the abces has to be opened with special tools. This way, the pus will drain out, and the damage on the articulations could be prevented. Antibiotics could be added in this process but they won't sort things out by themselves. This involves special tools ;

- Feeding the animals with mais is a good idea on paper, but the fact that they give them a small amount and that they are more then 50 animals in the Kraal creates a lot of competition and fighting. At the end, only the weekest animals, who were the most in need of extra feeding didn't get it. (we get back to the previous point, Kraal hopital should only be composed of a few animals, wich are truely in need of medical care).

- The explanations were given in july to the leaders of this Kraal, but nothing has changed since. They keep saying « yes, yes » after each advice, but I think they are stuck to their old habits. I would lead this Kraal by example. You should go trough it every couple of days for a few weeks, and show them how to run it. (Princess recieved all the advices and explanations, but a doubt that she will manage to do it by herself).

- Last tip. In PHL, They built bigger holding pens for the night, with barbed wire (150-100m). The cattle could even graze in it during the night time, and could always rest in a clean area, with no other animals pushing or disturbing them. This system is better for the hygene and the resting of the sick animals. Moreover, it doesn't require more work for the workers building them because you don't have to change the pens as often.

7) BBB/ Crossbreeding

Isi, taureau BBB x Brahman né le 12 janvier 2023 et ayant atteint 557 kg le 20-07-24 à 555 jours ou 18,2 mois.

This BBB x Brahman bull was 557kg at 18.2 months, raised in the pastures with the other calves and young bulls.

Hereover is a curve showing the average growth rate of the BBB x Brahman and the pure Brahmans (Nelore). You can see that they reach 400 kg 5 months prior the purebreds.

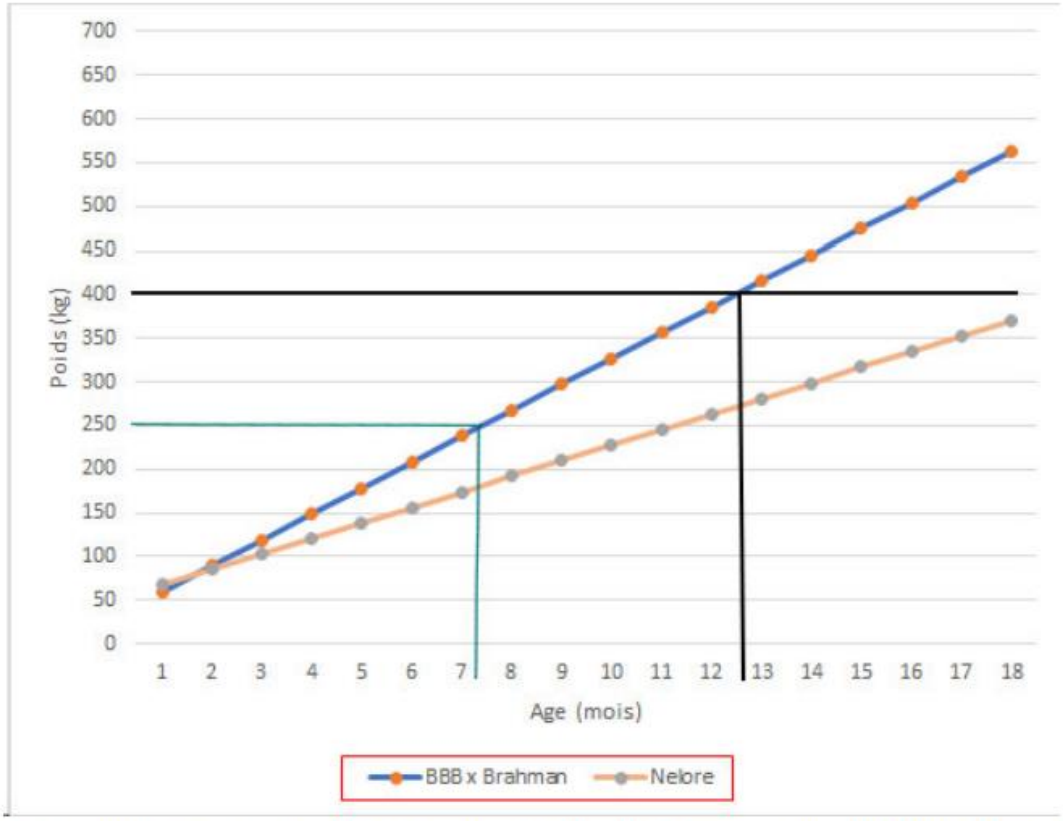


Figure 5. Evolution du poids (kg) en fonction de l'âge (mois) des animaux BBB x Brahman et Nelore.

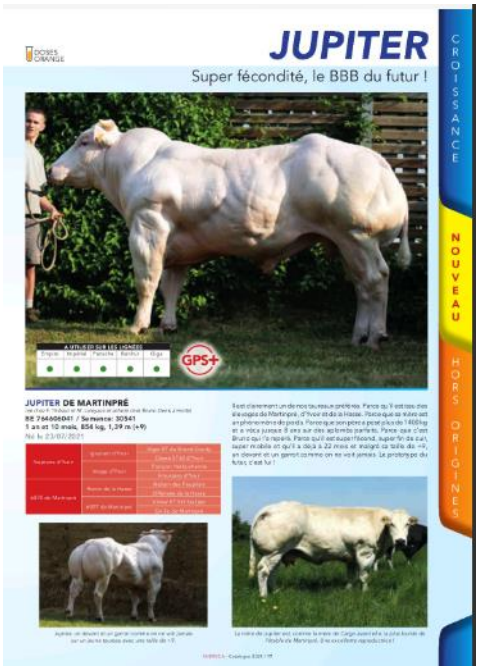
-To succeed in this kind of operation with such a breed, you have to select specific bulls, with required criteria.

a) Colour ; the bull has to be white. This way, the crossbred offspring will be dark grey. If you use a blue or black spotted bull, the progeny could be broun, or red looking. You wouldn't be able to ditinguish the crossbred calves from the purebreds.

b) Bulls with fine bone structures. In this particular breed, you can find animals with big bones (wide legs), wich is heritable, an can cause trouble as dystocia.

c) Tested bulls, with certified indexes. As mentionned earlier, we work with a lot of testing on the progeny as the birth weight, the growth rate, the vitality, and so on. You would want to work with the ones having the best indexes (It's not dearer !).

d) Find here a selection of a few bulls that could fit our cows at GoCongo ;



I negociated semen from those bulls for 7.76 euros each (delivered). It means 9.3$

These have been tested for the crossbreeding and did a pretty good job.

Note that a crossbreeding experience took place at grelka 20 years ago. The results were tremendous ; the BBB crossbreds were weighting 150kg more than the purebreds at 4 years old (Raised in the same conditions)