

# A Case Study of Brachiaria Grass for Improving Dairy Production in Kenya

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## INTRODUCTION

This summer I spent eight weeks in Nairobi, Kenya. My time in Kenya was spent researching Brachiaria grass and the effects that it has had on milk production in dairy cattle. 26% of Kenya's GDP is directly related to agriculture, while another 25% is indirectly related to agriculture. This makes dairy a large and growing part of Kenya's economy. This has led to a need for more milk to be produced within the country. Brachiaria grass is one of the ways that Kenyans are increasing milk production within the country.

## METHOD

- The first part of this study was to develop a better understanding of agriculture in Kenya and the role that it plays within the country.
- The next step was to begin narrowing the focus from agriculture in Kenya to the dairy industry in Kenya, this was achieved by having an interview with a typical dairy farmer.
- After narrowing the focus to dairy farming in Kenya, the focus was again narrowed to dairy farmers in Kenya who use Brachiaria grass to feed their animals. An interview was conducted with two dairy farmers who had been growing this grass for several years.
- The final step was to take a closer look at the Brachiaria grass itself. This was achieved by collecting samples of four varieties of the grass; MG4, Piata, Marandu, and Basilisk. These samples were then sent into the Kenyan Agriculture and Livestock Research Organization (KALRO). These samples were then processed and their crude protein content was analyzed.

## A PICTURE OF ME!

This was the first time I got to milk a cow! It was a very exciting moment for me personally as my great-grandfather was a dairy farmer. Growing up he often told me stories about being a dairy farmer.



## RESULTS

- The interviews with the farmers provided much information on how the grass is spreading in popularity throughout the country. Originally there was only two sources where farmers could acquire Brachiaria seeds, ILRI and KALRO. Now farmers are selling splits off of these plants.
- On average all of the varieties of Brachiaria grass that I researched had a higher crude protein content compared to other feeds typically given to dairy animals within the country.
- The dry crude protein content for Marandu was 15.12g./100g., Basilisk 13.11g./100g., Piata 13.96g./100g., and MG4 12g./100g.
- The wet crude protein content was Marandu 16.52g./100g., Basilisk 14.37g./100g., Piata 15.14 g./100g., and MG4 13g./100g.

## CONCLUSIONS

- Brachiaria grass is in fact a superior forage when compared to other forages used throughout the country of Kenya.
- After several interviews with various farmers it can also be concluded that many farmers within the country are also satisfied with the performance of this grass.
- Brachiaria grass has a higher crude protein content than soybean hulls and wheat bran. This means that farmers are able to get more protein and more biomass to feed their animals with.

## WHAT I LEARNED

My time in Kenya was an incredible experience. It wasn't all sunshine and rainbows, but I learned a lot about a completely different part of the world. Some key things that I learned this summer include:

1. Kenyans are very friendly and if you do not smile and say hello to someone when you walk past them you will be considered rude.
2. Muzungu is not an insult, it is just slang for foreigners and tourists.
3. When trying to purchase something in a market always bring someone who speaks Swahili, this way you do not have to pay tourist prices.
4. If you do not like to eat tomatoes and onions on EVERYTHING, then you should probably not go to Kenya.
5. The most important thing I learned is that even though I was in a completely different culture, the people made me feel right at home.

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