Performance of camels and cattle kept extensively on East African rangelands

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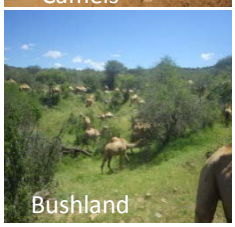
Introduction

- Camels (*C. camelus*) and local cattle breeds (*B. indicus*) are preferred livestock species kept in the arid and semi-arid regions of East Africa because they are better adapted to harsh climatic conditions and forage scarcity.
- Supplementation of animals with rumen-degradable protein (RDP) might improve animal performance during periods of inadequate nutrition.
- *Research question: Does season have a stronger effect on performance of exotic cattle as compared to local cattle and camels, and do exotic cattle respond better to supplementation than local cattle and camels?*

Conclusion

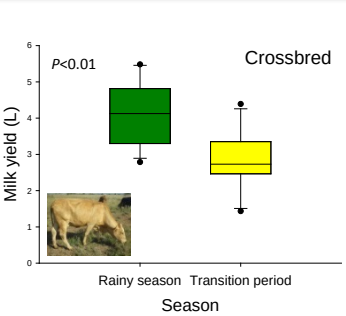
- ✓ Season had a strong effect on the milk yield of both cattle genotypes with an impaired performance during the transition period as compared to the rainy season.
- ✓ Milk yield of camels was not influenced by season, indicating a better adaptation than cattle to the environment.
- ✓ Treatment had no effect on milk yield in any of the genotypes.

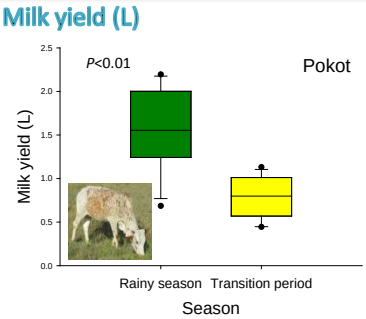
Animals and Methods

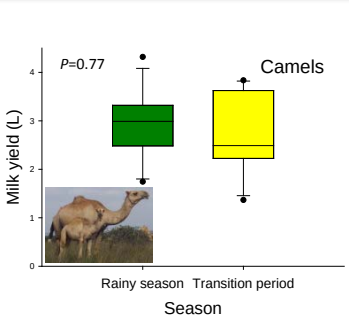


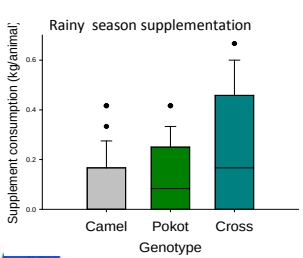
- ➢ Study area: Suyian Ranch, Laikipia, Kenya.
- ➢ 2 seasons: Rainy season (May-June 2015) & Transition period (Aug.-Sept. 2015), 36 days each
- ➢ 3 genotypes : camels, Pokot (local cattle genotype) and crossbreds (Boran x Guernsey)
- ➢ 2 treatments: one subgroup per genotype (n=6) supplemented with rumen-degradable protein (RDP+: 5% urea/molasses block/mix (camels) & 10% (cattle), the other subgroups without supplement (RDP-)
- ➢ Milk yield and composition assessed daily in the morning
- ➢ Statistical analysis using SAS (version 9.3)

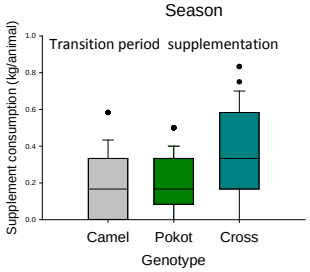
Results











❖ No significance effect of treatment and season on milk composition in all genotypes.

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