

## THE INFLUENCE OF SUPPLEMENTARY FEEDING ON THE CONCEPTION RATE OF YOUNG AFRICANDER COWS

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The breeding records of the Africander stud at this Institute show that during a period of 33 years only 52,5% of cows with their first calves at foot re-calved within 15 months. Cows calving for the first time at an age of up to 3,5 years had a re-calving figure of only 45,3%.

Africander heifers were obtained from various herds to determine the influence of lucerne supplementation for maintenance and/or concentrate supplementation after calving on the post partum conception rate of first calvers.

The following Treatments were employed:

1. Veld grazing and a phosphate-salt lick only.
2. The same as Treatment 1 plus 13,08 kg concentrates per week from calving to the end of the breeding season.
3. Veld grazing and a phosphate-salt lick and 9,53 kg lucerne hay per week during winter.
4. The same as Treatment 3 plus the same concentrate supplementation as Treatment 2.

Treatments 1,3 and 4 only were compared during the first season, due to the limited number of heifers that became pregnant as a result of unfavourable climatic conditions. Treatments 1 and 2 were, therefore, compared during the second season. The breeding season lasted for three months, from 8 December to 8 March. The conception rate was nil, nil and 71,4% for Treatments 1,3 and 4 during the first season and 37,5 and 87,5% for Treatments 1 and 2 during the second season respectively.

The results obtained show that a considerable improvement in conception rate can result in three-year-old Africander cows following concentrate supplementation after calving. The cows were grazing good quality Cymbopogon-Themedaveld with scattered acacia trees.

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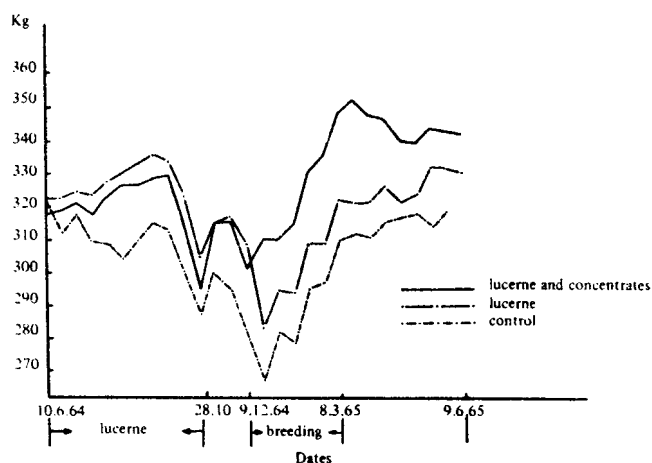


Fig. 1. — Changes in the livemass of the Africander cows during the course of the experiments in 1964/65

The influence of the lucerne hay and concentrate supplementation on the mass of the cows during the first season is illustrated in Fig. 1. Concentrate supplementation also stimulated the milk production of the cows and consequently improved the weaning mass of the calves.

In considering the advantages of this system, the following factors must be assessed: The cost of the feed and extra labour involved in supplementation against a higher calving percentage and possibly earlier calf crop with higher weaning mass and higher mass of cows at culling.

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