

PREGNANCY-ASSOCIATED GLYCOPROTEIN CONCENTRATIONS IN N'DAMA GOWS

FOLLOWED SEVERAL MONTHS AFTER PARTURITION AND MAINTAINED WITH A FERTILE BULL



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Introduction

N'Dama is the most representative *Bos taurus* breed in West Africa (7 million head). Being trypanotolerant, it has been used for large scale dissemination for grazing savannah in the regions infested by tse-tse fly.

Materials and Methods

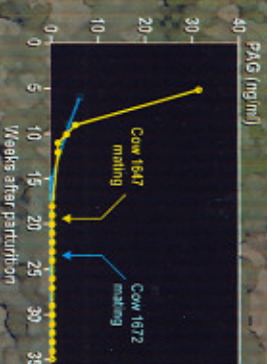
- ▶ 32 N'Dama cows maintained with a fertile bull
- ▶ Weekly collection of blood samples from parturition until the 4th-9th months postpartum
- ▶ Determination of PAG concentrations by homologous RIA (Zolf et al., 1992)



Results

- ▶ PAG concentrations decreased in the plasma samples to become under the threshold (0.8 ng/ml) around week 10-16 postpartum.
- ▶ After the typical decrease (Zolf et al., 1992), PAG concentrations remained under the threshold in all blood samples till the last observation (10 to 39 weeks postpartum), despite mating behavior were recorded

Aim
To determine if, in the continuous presence of a fertile male, a new pregnancy period could be initiated within 10 to 39 weeks after parturition



Plasma PAG concentrations of cows 1872 and 1847 during 34 and 35 weeks after parturition.

Conclusions

In conclusion, no PAG was detectable in the last blood samples (week 10th to 39th) of all the 32 cows investigated, indicating that no new pregnancy was evolving for more than 30 days at the end of the experimentation period

Perspectives

N'Dama cows were described as having extremely long intervals between two consecutive parturitions. If this phenomenon results from a long anestrus in the postpartum period or from reproductive failures (abnormal corpus luteum, embryonic mortality, etc) remains to be determined. Sequential weekly determinations of pregnancy-associated glycoprotein together with progesterone over the whole calving interval can help to elucidate this very important question.

The location of trypanotolerant cattle populations in West and Central Africa (FAO, Rome 1987)

