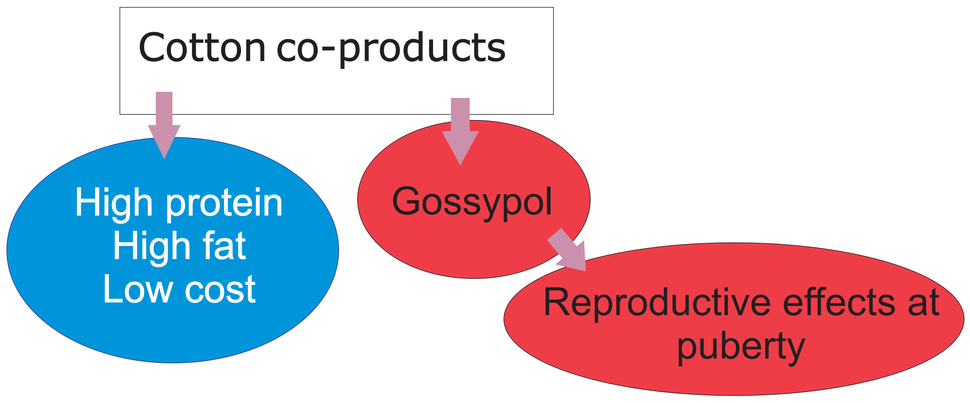
SEMEN TRAITS OF LAMBS FED WITH CO-PRODUCTS OF COTTON SEED (Gossypium ssp.)

PAIM, T.P.*[1]; VIANA, P.[2]; BRANDÃO, E.G.[2]; AMADOR, S.A.[2]; BARBOSA, T.M.[2]; CARDOSO, C.C.[2]; ABDALLA, A.L.[1]; McMANUS, C.[3]; LOUVANDINI, H.[1]

*e-mail: pradopaim@hotmail.com; tpaim@cena.usp.br
[1]Centro de Energia Nuclear na Agricultura – CENA/USP, Av. Centenário, 303, CEP 13400-970, Piracicaba/SP, Brazil.
[2]Faculdade de Agronomia e Medicina Veterinária – FAV/UnB, Brasilia/DF, Brazil.
[3]Animal Production Department – Universidade do Rio Grande do Sul, Porto Alegre/RS, Brazil.

INTRODUCTION



- **The aim was evaluate the influence of supplementation with cotton co-products in reproductive system of lambs during puberty.**

MATERIALS AND METHODS

- 24 Santa Inês lambs with 6 months of age and mean live weight of 21 ± 2.72 kg were housed in individual pens.
- Diets containing 50% of dry matter intake of coast cross hay (*Cynodon dactylon*) and four concentrate mixtures (treatments):
  - 20% of DMI cotton seed (T2);
  - 20% of DMI cottonseed meal with low oil (T3);
  - 20% of DMI cottonseed meal with high oil (T4);
  - Control (T1) without cotton.

- During 90 days, at each 15 days, scrotal circumference (SC) was measured and semen collection were performed using electroejaculation.
- Semen analysis: Volume (V); Aspect (A); Mass movement (MM); Progressive motility (M); Vigor; Concentration (Con); Morphology.
- Statistical analysis was performed with SAS®, being conducted: analysis of variance and Wilcoxon test for nonparametric data.

RESULTS

- There were no significant effects of T on the SC.

Table 1. Results of immediate semen analysis in ligth microscope.

	T1	T2	T3	T4
V (ml)	0,76	0,82	0,66	0,77
M (%)	60,81^{a}	48,12^{ab}	42,14^{b}	54^{ab}
Vigor (%)	68,9	52,8	51,9	60,2
MM (%)	73,4	56,9	48	53,8

V: volume; M: progressive motility; MM: mass moviment. Different letters in the same row indicate statistical difference (p<0,05).

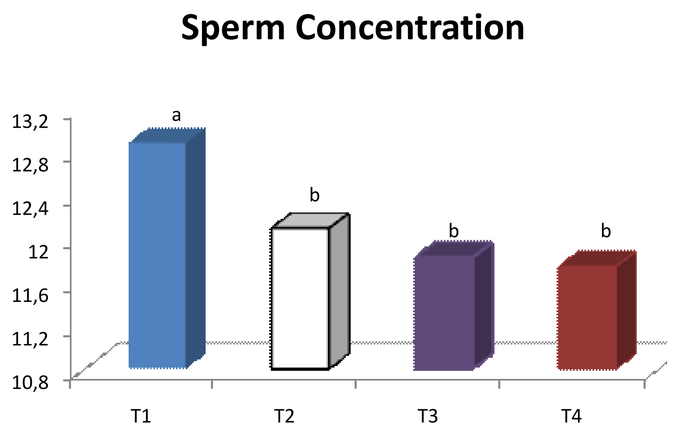


Figure 1. Results of sperm counts in a phase contrast microscope. Different letters above the column indicate statistical difference (p<0,05).

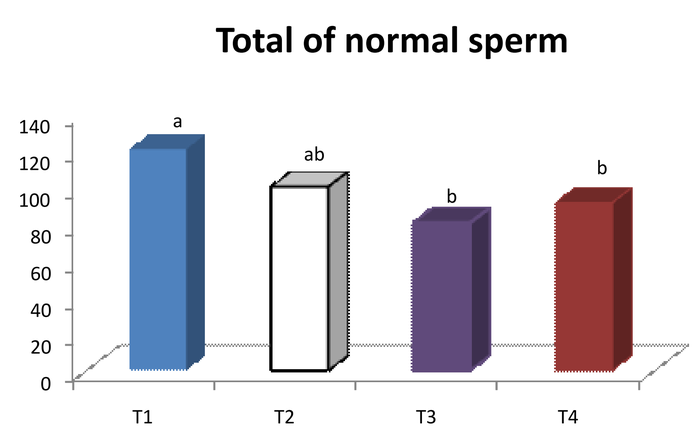
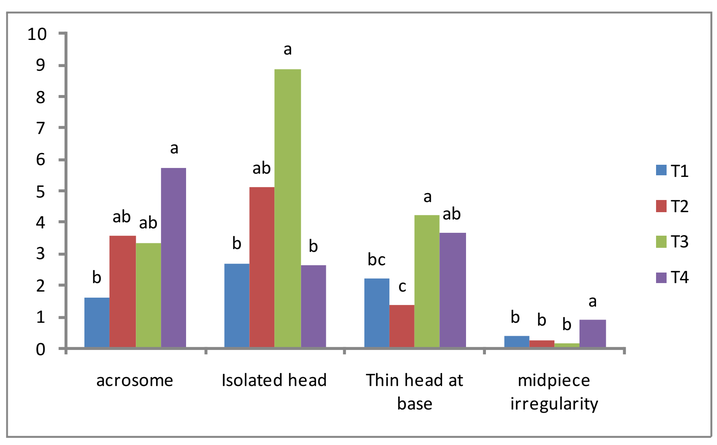


Figure 2. Results of normal sperm counts in a phase contrast microscope. Different letters above the column indicate statistical difference (p<0,05).



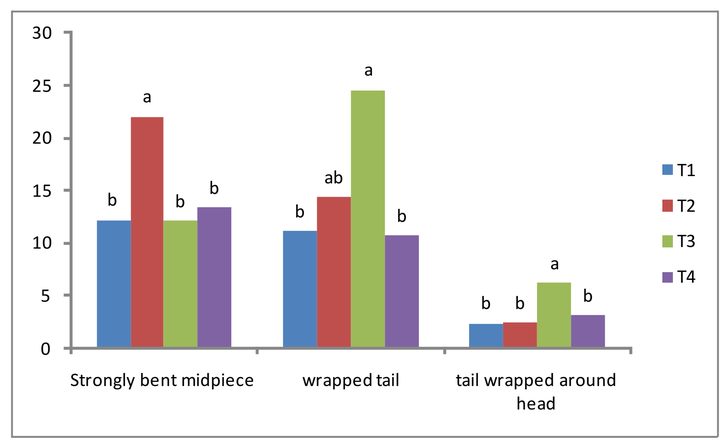


Figure 3. Results of sperm morphology that differ between the treatments observed in a phase contrast microscope. Different letters above the column indicate statistical difference (p<0,05).

CONCLUSION

- **Treatments containing co-products of cotton had higher amount of sperm pathologies.**
- **Therefore, diets containing co-products of cotton influenced negatively seminal parameters (qualitative and quantitative).**

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Centro de Energia Nuclear na Agricultura
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