

By contrast, while the urea-molasses block supplementation appeared to reduce the faecal egg counts immediately following the 2004 supplementation ($P < 0.05$), this did not hold true in 2005. Interestingly, in the tactically treated anaemic goats, the improvement in the number of kids suckled per doe year-on-year tended to be greater than in the non-anaemic goats. It is considered that the routine symptomatic treatment of anaemic goats may have been a key factor. More detailed investigations into the routine symptomatic treatment of anaemic goats are therefore recommended.

380. Use of CATT/*T. evansi* and LATEX/*T. evansi* for *Trypanosoma evansi* diagnosis in infected goats

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Trypanosoma evansi is the most widely distributed of the pathogenic animal trypanosomes, affecting domesticated livestock worldwide. Goats could play an important role in the dissemination of the disease in tropical and subtropical areas. However, diagnostic methods for *T. evansi* infection are not validated in goats, and the effectivity of diagnostic methods to detect parasite and antibodies induced by infection is unknown. Five goats were inoculated intravenously with, at least, 1×10^5 *T. evansi*. The animals were kept for 12 months, and were checked monthly for the presence of the parasite and specific antibodies. Four non inoculated goats served as control. Antibody detection tests used in this study were CATT/*T. evansi* and LATEX/*T. evansi*. Comparatively, blood was also examined multiple hematocrit centrifugation technique (Woo, 1969) Serologically, all animals became positive in CATT/*T. evansi* and LATEX/*T. evansi* within one month post-inoculation and remained all positive in the CATT/*T. evansi* with a minimum end-titer of 1/4. In LATEX/*T. evansi*, 52 of the 60 examinations were positive with a cut-off set at 1/2. All diagnostic methods performed in control animals resulted negative. Thus, parasitological and serological methods used in this study would be adequate to detect *T. evansi* infection in goats.

381. Genetic evaluation of resistance to strongyles in Creoles kids is affected by protein supplementation

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The aim of the present study was to test a standardised evaluation design of genetic resistance in Creole goats considering indoors experimental infection and protein supplementation. Three trials were involved with a total of 154 female kids chosen from 3 successive cohorts of the Creole flock of INRA-Gardel in 2007. After weaning, kids were allocated in 4 groups according to the amount of concentrate offered: G0 (without concentrate), G100 (22g crude protein d^{-1}), G200 (44g crude protein d^{-1}), G300 (66g crude protein d^{-1}). Kids from G0 to G300 were infected with a single dose of 10,000 *H. contortus* third stage larvae at Day 0 (D0). Each infected group was constituted by one half resistant and the other half by susceptible genetic indexed kids. The average breeding values on egg excretion at 11 months of age were distant from 0.70 to 0.61 genetic standard deviation depending on group. A control group (without concentrate and not infected) was made of medium indexed kids. Groups were balanced according to live weight. Faecal egg counts (FEC), packed cell volume (PCV), blood eosinophilia (EOSI) were weekly recorded until D42 after infection. Kinetics of each variable was modeled using mixed procedure of SAS software. The 10,000 L3 dose received by the kids induced a severe infection: 8000 eggs per gram at FEC peak, the PCV lower than 15% and mortality rate. However kids managed to cope with it when supplemented. The advantage of supplementation was already obvious at 22g crude protein d^{-1} . Interestingly, supplemented animals (G300, G200, and G100) tend to show a higher level of EOSI than the control groups (G0 and TEM). Resistant and susceptible kids had significantly different FEC variation within groups. Susceptible kids had 1.6 higher egg output than resistant kids in G0. This difference was not found in supplemented groups. These results suggest that, when proposing a genetic evaluation design for resistance to strongyles in Creole goats, animals should not be protein supplemented, otherwise actual level of individual resistance could be confused.