

## HOMEOPATHY AGAINST TICKS (*Rhipicephalus microplus*) IN CROSSBREDS DAIRY CATTLE

### HOMEOPATIA CONTRA CARRAPATOS (*Rhipicephalus microplus*) EM BOVINOS MISTIÇOS LEITEIROS

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The dairy farming is one of the main agribusiness activities in Brazil, but it suffers with the presence of parasites, particularly the cattle tick, *Rhipicephalus microplus*. Treatment of parasitic diseases with allopathic products is common, but it leaves residues in meat and milk, besides inducing tick resistance. Homeopathy has been applied successfully by some producers. This work aimed to evaluate the effect of a commercial biotherapeutic (Ectoderm®) made with the ectoparasites *Rhipicephalus microplus* (30 cH) and *Haematobia irritans* (30 cH), and the plants *Daphne mezereum* (6 cH) and *Rhus toxicodendron* (6 cH) in a calcium carbonate vehicle upon 36 crossbred (Holstein x Gir) female cattle. Ticks larger than 4 mm length present on all over the animal's body were counted daily during four months. Then, the animals were randomly separated, considering their tick susceptibility in three similar experimental groups of 12 animals. Each animal of T1 group received 10g biotherapeutic in 500g concentrate daily. T2 group was placed in the same pasture than T1 and received the same management, but 10g of placebo (calcitic limestone) in 500g concentrate per head daily. T1 and T2 animals had different troughs. The T3 group was placed in separate pastures but received the same forage and concentrate and placebo daily in the concentrate, like T2. Daily counting of ticks continued for 8 months (06/20/2013 to 02/19/2014). The experiment was conducted in a completely randomized design in layout plots in time consists of three groups, eight months and 12 repetitions. Total tick count showed that T1 had fewer teleogines (5,961a) than T2 (13,179b) which had fewer than T3 (19,162c) ( $P < 0.05$ ). Teleogines with morphological changes were found adhered to the skin and for three times we observed an infestation of the parasite life stages which didn't ingurgitate, only in animals from T1 group. We observed effect of the biotherapeutic reducing tick infestation in the T1 group since the third month of treatment which added the following numbers of ticks: T1=762a, T2=2,037a, T3=3,130b ( $P < 0.05$ ). It was not necessary to give any acaricide to any animal, but it was necessary to treat the *Haematobia irritans* infestation (all animals from the three groups) three times in the period of observation. The biotherapeutic reduced the tick infestation in T1 group and benefited the animals in T2, which live together with T1, probably by reducing the pasture larvae infestation.

Keywords: biotherapeutic, homeopathy, tick.

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