

Bovine weight gain: comparison between homeopathy and conventional chemical acaricide in the control of *Rhipicephalus microplus*

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In Brazil, the losses caused by cattle ticks were estimated to \$ 3.4 billion/year. The main causes are: weight loss, low feed conversion, bad quality for leather, anemia, transmission of pathogens, intoxications, death of animals, among others. The use of chemical acaricides is still the main form of control. Mistakes made regarding the season, to the form of treatment, to the product and *Rhipicephalus microplus*'s ability to develop resistance, allied to Brazilian conditions, broadly favorable to its development, contribute to increased resistance to almost all available chemical bases. Besides that, environmental contamination, of the milk and meat, intoxication of the workers make the control, exclusively chemical, increasingly difficult and onerous. Homeopathy has been widely applied to control parasites. Used in veterinary medicine since the VIII century, is Veterinary Medical specialty recognized by the Federal Council of Veterinary Medicine. The objective of this study was to evaluate the weight gain of cattle in the control of *R. microplus* treated with homeopathy and conventional chemical treatment. The studies were carried out at the Santa Mônica Experimental Field (CESM) - Valença, RJ and Laboratory of Parasitology of Embrapa Dairy Cattle, Juiz de Fora, MG, Brazil. Were used 36 females, from $\frac{3}{4}$ Dutch / zebu, with six months old, weighing 100 to 150 kg, distributed over 30 months, in 3 pickets of *Brachiaria decumbens*, naturally infested by *R. microplus* larvae, being 2 treatments groups and 1 control group. In the chemical control, after the sensitivity test, the active ingredient Clorfenvífós was used. Ticks were counted every 21 days and quarterly weighings. The mean weight gain/group and the mean of ticks/group were calculated. The mean weight gain was 77.025 kg, 90.270 and 79.944 in the chemical, homeopathy and in control groups, respectively. No statistical difference was observed between the parasite load of the groups. The weight gain, in the group treated with homeopathy, was 14.67% higher, compared to conventional treatment and 11.44% higher than in the control. These results suggest that homeopathy interfered positively in the parasite/host relationship, favoring a greater weight gain to the animals in the same parasitic load, when compared to the other groups. This evidence confirms the claim that homeopathy strives for a balance between living things and those with the agroecosystem. Given these numbers, it can be inferred that the use of homeopathy, in the control of *R. microplus*, has great advantage over conventional control, because besides being much cheaper, does not pose a risk of contamination to the environment, for animals and for people, besides leaving no residue and not inducing resistance. The ease of homeopathy administration and its contribution to animal welfare, by dispensing with the use of sprayers and the containment of the animals, reduce operational and product costs. Greater weight gain provides greater profitability. In this case, homeopathic control appears to be more sustainable than the conventional chemist control.