## Action of Neem Cake (*Azadirachta indica*) on *Haematobia irritans* in Nelore cattle

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Products made from neem could provide effective natural control of cattle ectoparasites without harming the animals, consumers or the environment. The aim of this study was to evaluate the efficacy of commercial neem cake in controlling H. irritans in beef cattle, using two treatments, each with 20 Nelore cows: the control group (supplied only with mineral

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salt) and the treated group (2% neem cake mixed with mineral salt according to the manufacturer's recommendations). To divide the animals, two fly counts were carried out 14 and 7 days before of the experiment, to form two homogenous groups. The animals were kept in paddocks 1 km apart. With the animals contained in a chute, the flies (y) were counted on days 7, 14, 21, 28, 35, 42, 49, 56 and 63. The hind region of each animal was photographed and each fly was counted by marking using the Paint Brush program. After statistical transformation the data were analyzed by the MXED procedure of the SAS program, considering days as repeated measures. There was a statistically significant difference ($P<0.05$) between the effect of the days. There was no statistical difference ($P>0.05$) between the treatments or the physiological state of the animals, because pregnant and non-pregnant cows were distributed uniformly in the two groups. The quantification via HPLC of the azadiractin A and B levels revealed the presence of 421 mg/kg and 151 mg/kg, respectively. We can conclude that the product did not demonstrate efficacy in controlling flies after 63 days of administration.