Efficacy of Doramectin 3.5% Against Dermatobia Hominis Larvae in Naturally Infested Cattle

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In this study 50 animals were selected from 80 cross-bred cattle (taurine x zebuine) naturally infested with Dermatobia hominis larvae, in a farm in Minas Gerais State. After randomization by the mean counts of nodules containing alive D. hominis larva present on the entire body surface of each animal, five groups of 10 animals each were formed and allocated to the following treatments:

GI - saline (control);
GII - doramectin 3.5% (700µg/kg);
GIII - doramectin 1% (200µg/kg);
GIV - ivermectin 3.15% (630µg/kg); and
GV - ivermectin 4% (800µg/kg).

All groups were treated subcutaneously on Day 0. Following treatment, the animals remained in the field, and counting of nodules were performed on Days 3, 7, and then weekly until the end of the experiment (133 DPT). Doramectin 3.5% showed an efficacy greater than 90% from Day 14 to Day 105 post-treatment, and a lower intensity of parasitism (P≤0.05) from Day 77 to Day 105 compared to doramectin 1%, ivermectin 3.15% and ivermectin 4%. Efficacy (geometric means) higher than 90.0% was attained from 28° to 77° DPT and 28° to 84° DPT by ivermectin 3.15% and ivermectin 4.0%, respectively. In groups treated with doramectin 3.5% and doramectin 1%, the number of counted nodules were significantly lower (P≤0.05), to that of ivermectin 3.15% and ivermectin 4% groups, from Day 7 to Day 28 post-treatment.