

Vermi-Tox Study

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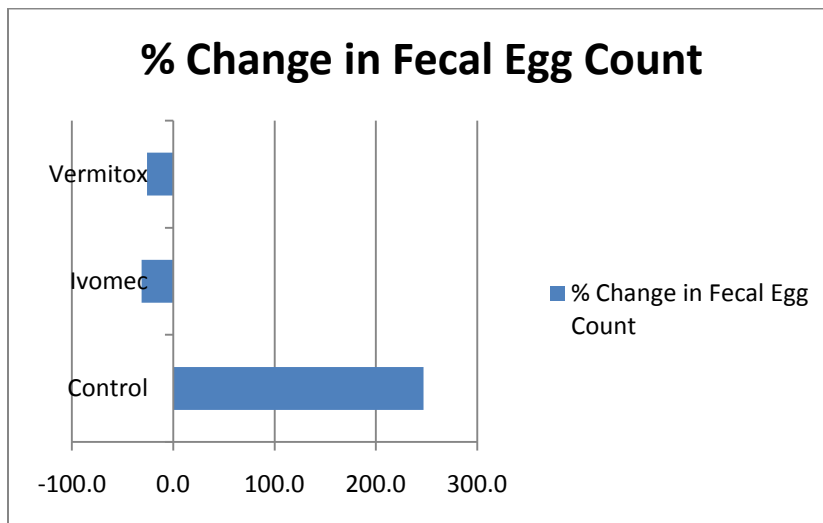
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Objective: To compare the effectiveness of an herbal dewormer Vermi-Tox (Agri-Dynamics, Inc.) with conventional treatments (Ivermectin, Merial, Inc.) on strongyle load in the spring 2010 kid population at the CSU Chico University Farm Sheep/Goat Facility.

Methods: Thirty mixed gender goat weanlings were randomized to one of three treatments according to initial fecal egg count. All kids were weaned between 45 and 60 days of age, and averaged 30 lbs. Animals were drylotted and fed ad-libitum grassy/alfalfa hay and mineral for the duration of the trial.

Treatments included: 1) Control (no treatment); 2) Ivomec injectable anthelmthic (according to label instructions); 3) Vermi-tox oral anthelmthic (according to label instructions). Four days post treatment, fecal samples were collected and subjected to fecal flotation's according to the Modified McMasters Technique using modifications by Whitlock.ⁱ The resulting total number of strongly eggs per gram of feces were calculated for both pre and post treatment. The % change in stronglye eggs count/gram of feces were analyzed by ANOVA and LSD mean separation was used to establish treatment effects.

Results: Both Vermitox and Ivermectin were equally effective in reducing fecal stronglye egg counts in weanling goats. Vermitox reduced fecal stronglye egg counts by 26%, and was not statistically different than the industry standard dewormer, Ivermectin at 31% reduction. Both treatments were significantly different from the untreated control animals, reported at a 250% increase in stronglye egg counts/gram of feces. The Vermi-Tox herbal dewormer worked as well as the conventional industry standard dewormer, Ivermectin, in reducing stronglye fecal egg counts in weaned caprine kids in their early stages of growth. In addition, 90% of all animals responded to the Vermi-Tox treatment as compared to a 70% response rate demonstrated by the Ivermectin treatment group, suggesting that Vermi-Tox is more consistent in its modality.



ⁱ Whitlock, H.V. (1948) Some modifications of the McMaster helminth egg counting technique and apparatus. J. Counc. Sci. Ind. Res., 21:177-180.