

Neema-Tox Study

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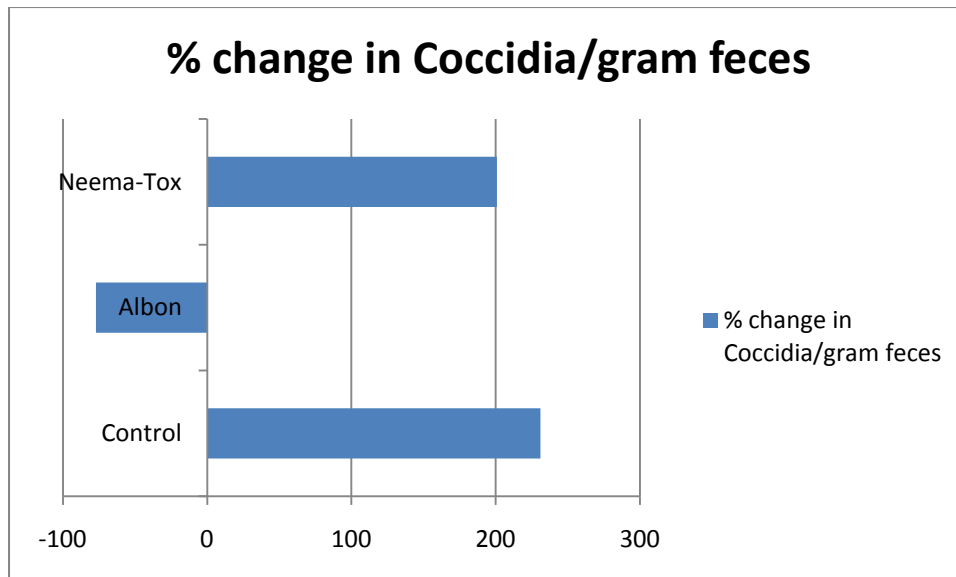
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Objective: To compare the effectiveness of an herbal dewormer Neema-Tox (Agri-Dynamics, Inc.) with conventional treatments (Albon, Pfizer Animal Health, Inc.) on coccidiosis in the spring 2010 kid population at the CSU Chico University Farm Sheep/Goat Facility.

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

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

Results: Albon (sulfadimethoxine) was most effective in reducing coccidiosis oocysts in weaned kids, with a 100% effectivity rate (all animals responded to treatment with a 77% reduction in total oocysts/gram of feces. Neema-Tox was not different than the control kids with a 200% increase in oocysts/gram of feces. Spontaneous recovery for the control kids was 30% and not statistically different from the Neema-Tox treatment group at 20%.



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