# The Effect of Formulation of Moxidectin When Administered Orally on Barber Pole Worm Levels in Goats

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The purpose was to study the effect of formulation of moxidectin when administered orally on barber pole worm levels in goats. Barber pole worms are a major threat to a goat's health. These worms feed off the nutrients in the blood of the goat causing many health issues for the animal and additional cost to the producers. Moxidectin is a wormer that paralyzes the nervous system of the barber pole worms, therefore killing them. Administering moxidectin orally allows for the worms to come into full contact with the wormer which in turn decreases the population. The control in this experiment was no moxidectin. This experiment was done on thirty-six female goats in the same environment, vaccination history, and feeding program prior to the experiment. Barber pole worm eggs present in the feces were counted to determine the amount of worms in the goat. The results showed a slight decrease in the control's barber pole worm levels after no moxidectin was administered. The treatment groups showed decreases in the worm levels at a statistically significant level. The results show that the hypothesis was not supported when comparing all of the groups at a statistically significant level. When comparing each group's before and after worm counts the null hypothesis can be rejected for the oral and injectable moxidectin groups, but must be accepted for the control group. Recommendations for further study would be to use the FAMANCHA method of identifying a goat's worm level before trying similar tests with other types of worm medications.

**Awards Won:**