

 **On-farm Demonstration Study - 2012**

**Experiment Ten**

**Goat producers – Norman and Gwendolyn Pierce**

**Efficacy of a pumpkin seeds in reducing fecal egg counts in meat goats**

*Procedure:*

For this study, we separated 15 meat goats into two groups and placed each group into separate paddocks. The two groups included a pumpkin seed group (PUM; ≈6 ounces of pumpkin seed/75 lbs of body weight) of five does and one kid and a control or untreated (CON) group of 8 does and 1 kid. Goats in the pumpkin seed group were offered 8 split pumpkins each day. It was assumed that each pumpkin contained 5.5 – 6 ounces of pumpkin seeds. At the beginning of the study, body weights, FAMACHA© scores and fecal samples were collected. The next sampling was done one week later (day 7) and then every seven days for a total of 28 days, with the exception of day 14 due to weather. FAMACHA© scores rate an animal’s anemia level on a score of 1 – 5 with 1 being bright red and healthy and 5 being white indicating severe anemia due to possible barber pole worm infection. Goats were dewormed if FAMACHA© scores were 4’s and 5’s or 3’s with other visual signs of parasitism (diarrhea, weight loss, rough hair coat, bottle jaw, etc.) and the number dewormed per group was recorded. Fecal samples were collected to determine individual fecal egg counts and group worm identifications.

*Results:*

Body weights for each group increased over the study period in both groups (Figure 1). FAMACHA© scores averaged 3.5 at the beginning of the study and was numerically lower for the pumpkin seed group for the remainder of the study (Figure 2). No animals were dewormed in the study. Fecal egg counts increased for the pumpkin seed fed group and remained consistent for the untreated group throughout the study period (Figure 3). Parasite larval counts averaged 72.5% for barber pole worms at the beginning of the study and increased to 79% by the end of the study.

Figure 1. Average body weights of meat goats fed pumpkin seeds or not over a 28 day period.

Figure 2. Average FAMACHA© scores of meat goats fed pumpkin seeds or not over a 28 day period.

Figure 3. Average fecal egg counts of meat goats fed pumpkin seeds or not over a 28 day period.

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