

**On-farm Demonstration Study - 2012**

**Experiment Nine**

**Sheep producer - Ralph Tarr**

**Efficacy of a pumpkin seeds in reducing fecal egg counts in Katahdin lambs**

*Procedure:*

For this study, we separated 22 Katahdin lambs into two groups and placed each group into separate adjacent paddocks. The two groups included a pumpkin seed group (PUMP; ≈6 ounces of pumpkin seed/75 lbs of body weight) of 12 lambs and a control or untreated (CON) group of 10 lambs. Lambs in the pumpkin seed group were offered 12 split pumpkins each morning. 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 2 weeks later (day 14) and then every seven days for a total of 28 days. 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. Lambs 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 steadily over the study period until day 14 when both groups started decreasing (Figure 1). FAMACHA© scores averaged 2.9 at the beginning of the study and was numerically lower for the pumpkin seed group for the entire 28 day period (Figure 2). Fecal egg counts, however, were not reduced during the study period and were numerically higher for the pumpkin seed group until day 28 when it was lower than the untreated groups’ fecal egg count (Figure 3).

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

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

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

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\*Numbers above bars indicates number of animals dewormed at that sampling in the untreated (CON; 1 treated on day 14 and another on day 28) and the pumpkin seed group (PUM; 1 dewormed on day 14).

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