Efficacy of Pumpkin Seed Oil on Parasite Control in Lambs
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The primary objective of this study is to determine the effectiveness of pumpkin seed oil in controlling internal parasites in Katahdin lambs (Ovisaries). Pumpkin seed oil was used as a natural de-wormer—a drug that rids the body of parasites—instead of chemical de-wormers. De-wormers contain anthelmintics, an agent capable of eliminating parasites, including internal worms. The target parasite in this study is Haemonchus contortus, commonly known as the barberpole worm or wire worm. The barberpole worm is a dangerous parasite that feasts on blood by piercing the lining of the abomasum, or fourth stomach, of small ruminants. Once feeding has begun, anemia is the most common symptom to follow, and if it becomes severe, death will occur. To meet the objective, the study utilized 18 Katahdin lambs separated into two treatments, a control (CON; n = 10 lambs) and a pumpkin seed oil group (PUM; n = 8 lambs). Starting at d 0 (start of experiment) and every week for 21 days, each lamb in the PUM group was drenched with 0.40 ml of pumpkin seed oil per kg of body weight. Lambs in the CON group received a similar drench of water each week. On dosing days, body weights, fecal and blood samples were collected from each animal in both treatments. Fecal samples were taken to determine fecal egg counts using the Modified McMaster technique while blood samples were collected to determine packed cell volumes.