

## 2024 TEXAS A&M AGRILIFE ANGORA PASTURE PERFORMANCE TEST

Spring-born Angora billy kids (55 head) from 5 consignors were delivered to the Sonora station Dec. 12, 2023 and managed on pasture for 2 months to acclimatize to ranch conditions. The test began on February 8, 2024. After initial shearing, body weights were recorded and fecal samples were checked for the presence of parasites, but indicated a very low worm burden. Billies were managed as one group on pasture throughout the test and provided a 20% breeder range cube at 1 pound per goat 3 times per week. Final body weight, scoring, and shearing was conducted on June 17, 2023. There were 54 animals that completed the test. One goat was removed during the test due to injury. A few minor cases of pinkeye were contracted, but prompt treatment by Coalson with oxytetracycline cured these issues without compromising the billies performance on test.

Pasture conditions from December to May were improved compared to recent years. Weight gain and fleece production were higher than in 2023, reflecting the improved forage quality throughout the test. In May, fecal samples were taken for parasite load and juniper intake. The NIRS juniper intake prediction estimated an average of 9% of their diet. Low and high AgriLife Cedar Eater (ACE) billy kids were also kept in the pasture alongside the Angora test billies. The high EBV goats consumed 14% percent juniper and the low EBV goats consumed 6% juniper. These juniper consumption values are quite a bit lower than what we have observed in the past and the reasoning is not exactly clear. However, it appears that the Angoras were still intermediate between the high and low ACE billies, suggesting the reduction was not specific to just the test Angora billies. One Angora billy was resampled ~2 weeks after the others and the NIRS prediction showed a result more similar to the consumption levels we have observed in the past (31%). Importantly, all of the goats had been moved to a new pasture, indicating that consumption of juniper may have been a result of location. We will need to investigate this behavior further.

Parasite burden was moderate this year, which provides an ideal scenario for the test. We were able to sample the billies on May 17<sup>th</sup> with an average fecal egg count of 1,142 eggs per gram. At this level of challenge, we are able to see some variation that could be indicative of genetics, but the worm burden was not high enough to significantly affect the billies health and performance, either.

Fleece measurements were adjusted to 180 days, per testing protocol. Lab scoured yield, fiber diameter, medullated fibers, and kemp fibers were measured from core samples of the entire fleece.

The visual scores were assigned according to the following criteria: Face cover 0 = bald...5 = closed (in the index, no advantage was given for values less than 1), Neck cover 0 = bare...5 = excellent cover, Belly cover 0 = bare...5 = excellent cover, Character 0 = none...5 = excellent.

An index value has been calculated for all bucks as shown below:  $\text{Index} = (4 \times \text{adj. clean fleece wt.}) + (25 \times \text{avg. daily body weight gain}) + (.12 \times \text{final weight}) + (3 \times \text{straightened lock length}) - (1.5 \times \text{fiber diameter}) - (3 \times \text{face cover score; no credit below 1}) + (2.5 \times \text{character score}) + (1.5 \times \text{neck cover score})$   
This index was empirically derived and should not necessarily be used exclusively for selection decisions. The index ratio, which is the index value of the billy divided by the average index multiplied by 100, was calculated and is listed on the report. All animals with an index ratio above 100 are above average for the 2024 test.

This report was compiled by Dr. Jake Thorne, Angora Pasture Test coordinator. Coalson Brown performed the daily supervision and feeding of the goats. Special thanks to Dr. Doug Tolleson, Dr. John Walker, Carson Millican, Ethan Pope, Katy Wardlaw and Jessie Dudak for their assistance with the test.