

2006 TEXAS A&M ANGORA GOAT PERFORMANCE TEST

This performance test was undertaken to assist producers in identifying and developing more productive Angora goats. The test started on March 8, 2006. There were 80 animals that completed the test on June 28. There was a 112-day test period for weight gain and a 114-day test period for fleece growth. Fiber length measurements represent an average of straightened lock measurements taken on the neck, back, and thigh. Fleece data (length and weight) have been converted to a 180-day basis. Fiber diameter measurements were obtained by measuring approximately 10,000 fibers from a core sample of the entire fleece. The column labeled fiber diameter STD shows a measure of the variation within a fleece, lower values are more desirable. Laboratory-determined yield, med, and kemp values were also measured from a core sample of the entire fleece. Performance standards have been established for several traits (minimum final weight of 110 lb, minimum fleece weight, actual and adjusted, of 8.0 lb, maximum fiber diameter of 50 μm , maximum kemp content of .7%, maximum med content of 7.0%). Animals that did not meet these standards are marked with an asterisk in the report and were not included in the list of top-ranked bucks.

A Committee of three cooperators sifted the animals for sale. Sifted animals which did not qualify for sale are not identified in the report and do not appear on the sale list, but the owners of these animals have been notified.

The visual scores were assigned by a scoring committee 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
Character	0 = none...5 = excellent
Lock type	F, R, R&F, Un, Sh or St

The F code refers to flat lock, R = ringlet, R&F = a mixture or an intermediate type between ringlet and flat, Un = unclassifiable, Sh = sheepy or partially sheepy, and St = straight. These values or classifications are not easily assigned, and none of the animals were exclusively as indicated. Those classified by the sifting committee as sheepy were ineligible for sale.

The column labeled "adjusted fleece weight" is an adjustment to partially correct for differences in initial body weight because animals that start the test at a greater weight are expected to have heavier fleeces. This correction is based on a regression coefficient of 0.029 obtained from regressing clean fleece weight on initial body weight. The animals were adjusted to the mean initial body weight of 87 lb. Thus, for each 10 lb of difference in body weight above the mean initial weight, the clean fleece weight would be reduced by 0.29 lb and the reverse for weights below the mean initial weight.

An index value has been calculated for all bucks as shown below:

$$\begin{aligned} \text{Index} = & (4 \times \text{adj. clean fleece wt.}) + (25 \times \text{avg. daily body weight gain}) + (.12 \times \text{final weight}) \\ & + (3 \times \text{straightened lock length}) - (1.5 \times \text{fiber diameter}) - (3 \times \text{face cover score}) \text{ (no credit below 1)} \\ & + (2.5 \times \text{character score}) + (1.5 \times \text{neck cover score}) \end{aligned}$$

This index was empirically derived and should not necessarily be used exclusively for making selections. The top 30% based on index value and which were not sifted and which met all independent culling levels are awarded certificates of performance. The index was used to rank the bucks to determine those eligible for sale by auction. Bucks in the top 50% were eligible for the sale as determined by the cooperators committee. The index ratio, which is the index value of the buck 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.

This report was compiled by D.F. Waldron and C.J. Lupton, Texas Agricultural Experiment Station, 7887 US Highway 87 North, San Angelo, TX 76901. URL: sanangelo.tamu.edu/genetics/angoratest.htm