## OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE AGRICULTURAL EXPERIMENT STATION ANIMAL HUSBANDRY DEPARTMENT STILLWATER, OKLAHOMA

## SCRUB VS. PUREBRED RAM

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## Scrub Versus Purebred Ram

The use of purebred sires on grade herds and flocks for production of market livestock has long been advocated by the agricultural colleges and forward looking men interested in livestock production. Some of the arguments advanced in favor of better sires are: 1, Quicker maturity. 2, No more cost with greater returns, hence more profit. 3, Greater gains for unit of feed eaten. 4, More value per pound when marketed.

There has been considerable work done in various sections of the country in demonstrating the value of a purebred bull in grading up beef and dairy herds. The Missouri Station, several years ago, reported the results of an interesting trial in the use of a purebred ram.

With a view of checking some claims made in favor of better sires and in order to have some concrete example to place before the farmers in urging the use of better sires and particularly the use of purebred rams, the Animal Husbandry department of the College planned and executed a small test comparing the purebred with the scrub ram as sires of market lambs. Objects:

1. To compare gains made by lambs sired by a purebred ram with gains made by lambs sired by a scrub ram.

2. To compare selling price (value) and profit from lambs sired by a purebred ram with price and profits of lambs sired by a scrub ram.

In the fall of 1922, nineteen head of grade ewes were purchased near the College. From accompanying pictures, it will be seen that the ewes were decidedly plain—all showing a lack of improved blood and apparently of rather mixed blood as a foundation.

These ewes were divided into two lots, great care being taken to insure as much uniformity as to type, horns, etc., as possible. A purebred Shropshire ram was placed with the lot of nine ewes and a scrub ram with the lot of ten ewes and remained with them until about November 20. These ewes were pastured on creek pasture without the use of any harvested feeds until January 9, 1923, and at that time were brought to the barn and fed with the regular flock until lambing time. The ration fed between January 9 and lambing time consisted of about  $\frac{1}{4}$  lb. of grain mixture of oats and bran, 2 to  $\frac{21}{2}$  lbs. of silage and 1 to  $\frac{11}{2}$  lbs. of alfalfa hay daily.

The ewes bred to the purebred ram averaged 104 pounds in weight and those bred to the scrub ram averaged 104.7 pounds in weight. The first lamb was dropped March 17 and the last lamb April 13. There were 14 lambs born in each lot. The average weight of the lambs at birth was 8.1 for those sired by the scrub ram and 8.85 for those sired by the purebred ram. The weights were as follows:

가장 감독했는 것이다. 1월 20년 3월 20년 3월 20년 1월 20년 3월 20년 3월 20년 3월 20년		Scrub	Purebred
May 18 .		35	37
June 20	- 1991년 - 1991년 - 1991년 - 1991년 - 1991년 - 1991년 - 1991년 - 1991년	40,4	* 39.5
August 8		57.1	60
November	16	71	75.5
March 14		95	103.2

The ewes and lambs were all run on permanent pasture during the summer without any grain fo reither ewes or lambs and the lambs were weaned August 8. They were then run on pasture until put on feed in November.

The lambs were gradually put on a grain ration of shelled corn after November 16. They were continued on corn and alfalfa hay until February 25 and were marketed at Fort Worth in March, 1924. The average weight of the lambs at that time was: those sired by purebred, 103.2 lbs.; those sired by scrub, 95 pounds.

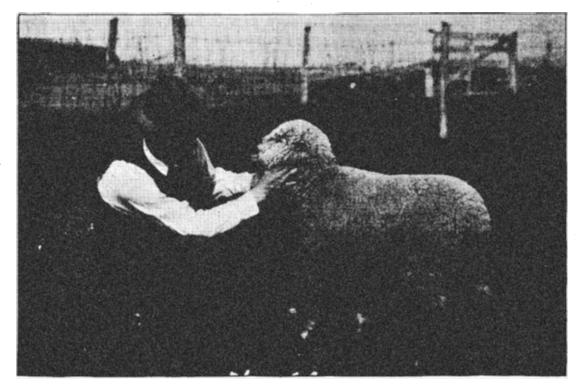
It will be noted in the partial list of weights given above that the lambs with a purebred sire were heaviest at weaning time and when placed on feed. Although they consumed no more feed than those sired by the scrub ram, they gained faster and hence made more economical gains than lambs sired by a scrub ram. The lambs sired by the purebred ram put on flesh more readily and were a neater and trimmer bunch of lambs at the end of the feeding period than those sired by the scrub ram.

In addition to more economical gains and greater finish, the lambs sired by the purebred, as shown in the accompanying picture, showed much more style and quality than those sired by the scrub ram. This difference in quality and appearance as well as a difference in finish has a market value as will be seen by noting the valuation of the two lots. The value of these lambs at the Fort Worth market was \$15.50 per hundred for those sired by the purebred ram and \$14.75 for those sired by the scrub ram. This makes a difference of \$1.98 per head in favor of the lambs sired by the purebred ram with no extra expense save the added expense of the purebred over the scrub ram. These lambs were all a little over weight at marketing time and as a result did not realize the price they would have if marketed thirty days sooner.

From the difference in selling price of the purebred and scrub lambs, it is readily seen that a purebred ram with a flock of grade ewes will more than pay for himself on one crop of lambs. One ram should be able to serve forty ewes and at the rate of \$1.98 a head added value to the lambs, the purebred will return to his owner somewhere between \$50 and \$75 for each year of use.



Average Lamb Sired by Purebred Shropshire Ram, Weight 104 pounds, February 27, 1924.



Average Lamb Sired by Scrub Ram, Weight 91 Pounds, February 27, 1924. Shows poorer form with less fullness of leg than lamb sired by purebred ram.