

Feeder Lambs

research seeks cause of break among lambs on irrigated pastures

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THE EVIDENCE DEVELOPED in two years of study—with three lots of lambs on a ranch in Mendocino County—indicates that there are a number of factors involved in the “break” which frequently interrupts the finishing of lambs on irrigated ladino and grass pastures.

The break appears to be quite general, in certain seasons, throughout the irrigated pasture areas of the state. It usually appears rather late in the grazing period, and after the lambs have reached a considerable degree of finish.

The lambs become unthrifty, lose weight, develop diarrhea, and frequently die.

The pastures used for this study—extending over two pasture seasons—contained a good stand of approximately 50% ladino and 50% grasses. They were irrigated about every 15 days. Salt and water in troughs were available at all times.

The lambs were fed dry hay three days before turning on pasture to avoid a feed upset. Then they were turned into pasture one hour the first day. The time was increased gradually until the tenth day when they remained on the pasture continuously.

The three lots were moderately stocked, with ample forage available all season.

One lot was fed chopped clover and ryegrass hay with rolled barley equivalent to 20% of supplemental feed.

The lambs on pasture alone made gains comparable to the lambs that were fed chopped hay and rolled barley.

No break occurred the first year but did occur during the second year of these studies.

Chemical Analysis of Pastures

Samples of the pastures taken at two-week periods throughout the two seasons gave no probable cause for the upset of the lambs.

Protein increased and cellulose decreased in both grasses and clover as the season advanced.

Parasites

No marked difference was shown between gains of lambs that received treatment for parasites and those that did not. No difference was shown between those treated with phenothiazine and cunic mixture.

Autopsy of lambs at the test ranch in Mendocino County and at Davis, as well as blood samples and fecal egg counts, revealed that parasites were not an important factor at that time. However, parasites should be considered as a possible cause in any further studies.

Rate of Stocking

In two lots of lambs on pastures that were heavily stocked—with 20 lambs per acre—the break was more pronounced.

It was less severe in the lot stocked with 15 lambs per acre.

This indicates that overstocking may be a factor in this difficulty.

Rotation Grazing

One lot in which the break occurred was rotated between two pastures.

Weight gains for the season were con-

siderably less in this lot than in the lots on continuous grazing.

This would indicate abrupt changes of forage may be one of the causes.

In this experiment, only two fields were available for rotation grazing. A properly applied system of rotation, including at least four fields, would avoid abrupt changes in forage and would seem to be desirable.

This test proves an abundant supply of well-grown forage, at all times, is an outstanding factor in successful fattening of lambs on irrigated pastures.

Weather Changes

When the break occurred in the second year of the test—on September 20—the weather may have been a factor.

From September 4 to 11 the maximum temperature remained over 100° F with a peak of 109° F and a sudden drop during two days to a maximum of 85° F, continuing low for nine days until September 21. During this low period, the minimum temperatures ranged between 36° F and 45° F.

This change of temperature may have affected composition of the feed and consequent thriftiness of the lambs.

Time of Season

The highest rate of gains in all lots of lambs occurred during the early summer period, and indications of unthriftiness began to develop with the advance of the season.

Conclusion

More research is necessary to definitely establish causes and methods of prevention or cure although this investigation has indicated several probable causes of the break among lambs on irrigated pastures.

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Composite illustration showing thrifty lambs with considerable finish and without evidence of break.

