The Value of Enzymes Added to Cattle Rations, Project Com. 5-662, 1
Progress Report
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Feed is stored nutrients for animals. The value of the feed depends on the nutrients it contains and the ability of animals to obtain these nutrients for their bodies to use. Enzymes are organic catalysts that have the primary responsibility of breaking down food so it can be absorbed and used. The more efficiently this work is done, the greater the value of the feed. This test is being conducted to determine the value of enzymes added to cattle-fattening rations.

Three lots of 10 animals each are being fed the same ration except for the added enzymes. The average daily ration is shown in Table 25, as are results of the test for the first 112 days. There are no significant differences in gains at present; however, lot 12, which receives a com-

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The Value of Grain Sorghum Harvested as Silage and as Dehydrated Pellets. Project 567.
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Combine-type sorghum grain is widely grown in Kansas, and normally only the grain is harvested. In many instances, the corn at harvest time is such that the grain cannot be stored without artificial drying. Sometimes there is danger of losing immature grain because of early frost. This test was planned to study the value of the entire grain sorghum plant harvested as silage and as dehydrated pellets.

Experimental Procedure
Twenty Hereford steers castrates were divided into two lots of 10 animals each, the same grade as the uncastrated animals. Only one of each set of animals was actually used as an animal. The other animals were used as controls.

Results and Observations
Results of the wintering phase and the first 34 days of fattening are shown in Table 24. The fattening phase had to be terminated for the animals on silage at this time because of warm weather and excessive silage spoilage. Those receiving silage had a total of 209 days with an over-all average daily gain of 1.93 pounds. The silage produced economical gains but the cost of dehydrating and pelleting made the gains very costly with the pellets. Weight gains were essentially the same for