Cattle gain more on inoculated silage

DES MOINES, Iowa — Cattle fed silage inoculated with a bacterial culture to improve fermentation showed a 15.8 per cent gain in feed efficiency in a recently-completed Kansas State University study.

The 78-day test conducted by John R. Brethour at the Fort Hays experiment station compared gains of cattle fed ordinary silage and silage inoculated with two bacterial cultures. The greatest improvement in efficiency came from silage treated with Sila-Bac (R) brand silage inoculant, a product of Pioneer Hi-Bred International, Inc.

Forage sorghum was put up at 66 per cent moisture in upright, concrete stave silos. Silage in one silo was inoculated using one pound of Sila-Bac silage inoculant per ton of forage; no treatment was applied to the control silage.

Results of the first phase of the Fort Hays experiment were announced at a field day on April 27. Copies of the complete report are available from Kansas State.

Treatment	
Number of head	
Initial wt., lbs.	
Final wt., lbs.	
Daily gain, lbs.	
Avg. daily ration, lbs.	
Sorghum silage	
Supplement (1)	

(1) Includes 2 lbs. rolled m premix and .08 lb. ammonium

The .27 pound greater average daily gain for Sila-Bac-inoculated silage compared to the average of the controls amounts to a 15.8 per cent improvement in feed efficiency. This improvement would result in $7.77 added return per ton of silage fed, assuming 70 cent cattle and $1 per ton for inoculant.

Brethour cautions that, "There is so much difference among silage preservatives being marketed that it would be difficult to transfer these results to other brands."

The research also showed improved bunk life or keeping quality for inoculated silage. When silage is removed from the silo and exposed to air, fermentation may begin again unless the feed is eaten immediately. This refermentation may cause additional nutrient losses.

To compare the bunk life of inoculated and untreated silage, the feed was held in wagons for 16 hours after unloading from the silos. Outside air temperature was 30 degrees Fahrenheit. Untreated silage temperature rose from 70 degrees to 96 degrees Fahrenheit during this period, indicating refermentation and loss of dry matter and nutrients.

Treated silage went from 46 to 44 degrees Fahrenheit, an indication of high stability and no refermentation which could reduce feed value.

Additional tests are underway at the Kansas State University Manhattan station and at the Pioneer Hi-Bred International, Inc. animal research station at Durant, Iowa. Reports of these tests are expected in about six weeks.

Here is a substitute for grass

UNIVERSITY PARK – If you have trouble growing grass under shade trees or if you have a steep terrace or slope that needs the strength of a muscleman to struggle with a lawn mower, then a ground cover is one of the answers to your problem. Ground covers are low plants that spread quickly and are used where lawn grasses do not grow well or where grass is hard to maintain. According to James J. McKeehen, Delaware County Extension Agricultural Agent more than 200 plants can be used as ground covers but ivy, pachysandra, and periwinkle (myrtle) are the most popular and known as the "big three." Now is a good time to buy and plant ground covers. If you're working under the trees where the ground is dry and there are plenty of roots, dig a picket, fill it with a mixture of good soil and peat moss, and plant the ground cover in clumps or single plants. Next spring spread a granular 5-10-5- fertilizer. On terraces, slopes or banks, mulch the area first with salt hay or straw. To keep the mulch from blowing away, tie it down with string or baling twine in a crisscross pattern and anchor it to pegs, then make your pocket and plant your plants. If preparing a newly-graded bank, use the same procedure as you do when planting annual flowers. Spacing of plants depends on their type, and how quickly they will spread. One plant, or clump, every 1 to 4 square feet is a good guide. Closer spacing will cover the area quicker, but it will cost more.