

tively. The sows in each trial were divided into four experimental treatments as follows:

1. Control. No supplemental choline or dichlorvos was fed during gestation.
2. 350 mg of choline per lb of diet during the entire gestation period was fed.
3. 250 mg of dichlorvos per lb of diet during the last 30 days of gestation was fed.
4. Combination of treatments 2 and 3 was fed.

Data collected included total number of pigs at birth, number of live pigs at birth and number of live pigs at 21 and 42 days of age. Individual pig and litter weights at birth, 21 and 42 days were also collected. Fecal examination for gastrointestinal parasites in each sow and two randomly selected pigs from her litter when 42 days of age was also conducted. One randomly selected pig from each of 10 different sows in each treatment was examined at slaughter for evidence of parasite migration.

Data from the two described trials will be analyzed to study the effects of supplemental choline and dichlorvos and the interaction of the two on reproductive performance. In addition, it is planned for two additional trials involving 100 brood sows each to also be conducted.

Utilization of Wheat Silage in Wheat and Bermudagrass Stocker Programs

G. W. Horn, W. A. Phillips, L. E. Walters,
O. L. Walker, W. E. McMurphy, and Ann Kountz

Problems associated with cattle grazing wheat pasture have been described for many years and include wheat pasture poisoning of cows and frothy bloat of stocker cattle. Although these problems may result in substantial economic losses, losses incurred by wheat pasture stocker operators as a result of poor stocker weight gains, due to (1) inadequate fall and(or) winter wheat forage and (2) stockers being out of feed because of snow and(or) ice cover of wheat forage, while being much less dramatic, are probably greater. Identification of sound feeding programs for wheat pasture stockers, therefore, has the potential of increasing total beef production from wheat pasture and adding stability to wheat pasture stocker operations.

Large variations in the amount of forage available for grazing also represents a critical management problem in bermudagrass stocker programs. Stocking rates designed for the periods of lower forage production coupled with hay removal during periods of peak forage growth represent the usual approach to this

problem. Use of heavier stocking rates and a silage supplemental feeding program would be an alternative approach.

A large percentage of total beef produced in this country is merchandised as ground beef. Many studies have been conducted relative to producing choice beef on all forage or limited-forage production systems. Similar studies in which the beef carcass was intended primarily for the ground beef market have not been conducted.

This research project was initiated at the Southwestern Livestock and Forage Research Station, El Reno (Ft. Reno) in the fall of 1981 and will continue through the bermudagrass growing season of 1984. The objectives of the project are:

1. To determine the effect of feeding wheat silage to stockers grazed on wheat and bermudagrass pastures on:
 - Live and carcass weight gains, and total beef production per acre. The effect of stocking rate on silage consumption will also be measured.
 - Amount of forage produced, and quality of available forage.
 - Wheat and bermudagrass forage intake.
 - Total ration (wheat or bermudagrass forage plus silage) dry matter digestibility.
 - Carcass characteristics of the cattle at the end of the bermudagrass growing season.
2. To determine the economics of the two beef production systems (i.e., wheat and bermudagrass pasture alone versus wheat and bermudagrass pasture plus supplemental silage).