AGRICULTURAL NEWS LETTER

FEDERAL RESERVE BANK OF DALLAS

Vol. 10, No. 3 DALLAS, TEXAS March 15, 1955

FINANCING TEXAS BROILER PRODUCTION

In order to determine the influence of financing on the Texas broiler industry, a survey was conducted by Texas A. & M. College during the summer of 1954. Twenty-nine agencies supplying credit to Texas broiler producers were contacted — including feed dealers and manufacturers, banks, processors, and production credit associations.

The study indicates that feed dealers and manufacturers were financing directly 90 percent of the broiler producers. Most of the dealers and manufacturers stated that they started financing broiler flocks because producers could not obtain credit elsewhere or because competition from other feed dealers made it necessary to provide the financing service in order to sell feed and other supplies to producers.

As feed dealers attempted to increase sales of feed and supplies, particularly when low prices to producers reduced output, credit requirements were relaxed and easier terms were offered to broiler growers. In spite of the recognition by lenders of the destabilizing effect that feed-dealer financing has upon the broiler market, competition and high fixed costs have led them to continue these practices.

Financial worth, credit rating, production experience, and a chattel mortgage on the birds are the main requirements of feed dealers for extending credit. Banks require a more thorough credit investigation and more security than do the feed dealers. Most feed manufacturers and dealers were of the opinion that their financing had benefited the industry, but a majority expressed the desire to have banks handle all loans directly. The A. & M. College study reports that banks generally prefer to advance credit to local feed dealers, who, in turn, finance the growers.

Service charges for financing used by 14 feed dealers were:

14 percent charged .5 cent a chick

58 percent charged 1 cent a chick

14 percent charged 1.5 cents a chick

14 percent charged 6-percent interest

Discounts were given to growers who paid cash for feed and chicks and who hauled their feed. Discounts ranging from 10 cents to 25 cents per hundredweight for feed were reported or, in some cases, 3 percent of the feed costs. An additional 10-cent reduction per hundredweight was made to producers who hauled their feed. Two dealers said that they allowed a discount of 1 cent per chick to cash buyers.

Typically, credit was issued to broiler growers under the following conditions.

The feed dealer provided the feed, chicks, and other items necessary to produce a brood of broilers, and the grower provided the houses, equipment, and labor. A written contract was executed, and the lender took a chattel mortgage on the birds. The dealer supervised management practices.

The feed dealer made the marketing arrangements, and, upon sale of the birds, the check was drawn in favor of the dealer or jointly to the dealer and grower. After deductions for costs of the brood, the remainder of the proceeds went to the grower.

In case of losses, the dealer carried the deficit over to the next brood. Some dealers carried "guarantee no-loss plans."

Under this arrangement, the grower suffered no loss except labor costs, but the costs of the chicks were increased from .5 cent to 1 cent a chick more than the per-chick costs to producers not covered by the no-loss plan.

The report points out several disadvantages to the type of broiler financing prevalent when the study was made. These are discussed below.

Marginal growers have been kept in business, and lower prices have prevailed because of production in excess of the amount which could be marketed profitably. Efficient producers are dropping out because of decreasing returns, and an increase in the number of part-time growers is taking place.

Many of the management decisions have been taken over by feed suppliers as much of the risk has been transferred from grower to feed dealer, and growers have less incentive to increase efficiency. The number of cash customers is decreasing, since they feel that present discounts on feed and chicks do not compensate for the better service and marketing arrangements supplied to growers using feed-dealer credit.

The Texas A. & M. scientists conclude that easier financing and continuing growth in the consumer's use of poultry meat have been largely responsible for the rapid growth of the Texas broiler industry in recent years.

Kill Hardwoods Now

Undesirable hardwoods are using moisture and plant minerals needed for the production of forage for livestock, according to A. H. Walker, Extension range management specialist of Texas A. & M. College.

Winter is an ideal time to kill unwanted hardwoods, and either 2,4,5-T or ammate is recommended. The cheapest and most effective results usually are obtained when 2,4,5-T is dissolved in diesel oil or kerosene.

The strength of the solution depends upon the kind of trees and the method of treatment. In central and east Texas, 1 pound of 2,4,5-T in 9 gallons of diesel oil applied in frills (overlapping ax cuts) has given economical, high-percentage kills. The overlapping ax cuts should completely encircle the tree. Trees treated in the fall do not show as high-percentage kills as those treated during the winter.

Fertilizers Pay in Rolling Plains of Texas

Returns of $5 from cotton and $2 from castor beans and grain sorghums for each $1 spent for fertilizer were realized in experiments in the Rolling Plains of Texas, reports a recent release of Texas A. & M. College.

As a result of the tests conducted on the farm of H. J. Tabor, south of Chillicothe, Texas, it is recommended that an application of 30 pounds each of nitrogen, phosphorus, and potassium be applied to cotton, castor beans, and sorghums grown on the light, sandy soils in the Rolling Plains areas.

Fertilizer tests on cotton were conducted from 1949 through 1953 on an area of Miles sand. No data were obtained from the 1950 cotton crop as a result of an uncontrollable infestation of boll weevils.

Nitrogen was found to be the limiting factor in the production of cotton. Applying 30 pounds of nitrogen increased yields as effectively as an application of 60 pounds. After the nitrogen requirement was met, cotton responded to phosphorus and potassium applied in combination. There was no

response to either phosphorus or potassium applied alone.

The highest average yield obtained was 460 pounds of lint cotton when 60 pounds each of nitrogen, phosphorus, and potassium, plus 5 tons of barnyard manure, were applied. However, the tests indicate that an application of 60 pounds of nitrogen each year is excessive for the moisture conditions in the area.

The results of fertilizer tests on yields of castor beans during 1951 and 1953 were similar to those of cotton. Nitrogen was the most deficient plant food. An application of 30 pounds of nitrogen was almost as effective in increasing yields as 60 pounds. Best results were obtained when all three of the major plant foods were used in combination.

In 1951 and 1953, sorghum yields increased with the first application of 30 pounds of nitrogen. A further increase in yields was noted with the application of phosphorus and potassium in combination. Although maximum production was obtained when 60 pounds each of the three fertilizers were applied, an application of only 30 pounds each was almost as effective.

The A. & M. College tests indicate that, in dry years, crops produce better in the Chillicothe area on coarse-textured soils than on soils with fine textures. Since moisture generally is limited in the area, the use of fertilizer on clay soils is more hazardous than on sandier soils.

Don't Plant Cotton Too Deep

Cotton growers in the High Plains of Texas tend to plant their cotton seed too deep, according to a progress report by the Texas Agricultural Experiment Station.

As a result of tests on the Texas High Plains, it was concluded that the optimum covering depth for cotton seed for best emergence and yield is 1 to 2 inches. Even if moisture and seedbed conditions are ideal, a skippy stand may result if cotton seed are not covered to the right depths.

The emergence of cotton seedlings as affected by depth of covering was studied at the Lubbock Substation in 1951 and again in 1953. In the 1951 tests, plantings of Stormmaster seed were made on May 24, and emergence counts were made on May 29, May 31, June 2, and June 6.

The test blocks were wet thoroughly with a garden sprinkler after planting to insure compaction and crusting above the seed. Acid-delinted seed was used at a planting rate equivalent to 39 pounds of seed per acre.

The greatest percentage of the cotton plants emerging after 13 days were in those plots covered to a depth of 1 to 2 inches. A significant difference was noted in the percentage of emerging plants which were covered only ½ inch and those covered 3 inches.

In the 1953 test, irrigated plots were planted on May 22 at the rate of 30 pounds of chemically delinted seed per acre. These

Control Cotton Insects!

Insect damage cost Texas cotton farmers $561,389,400 from 1949 through 1953, according to National Cotton Council estimates published by the Texas Cottonseed Crushers Association. The lowered cotton yields, because of insect damage, reduced production an estimated 2,816,350 bales of lint and 1,175,200 tons of seed during the 5-year period.

Guides for controlling injurious cotton pests are available at county agents' offices in all states of the Eleventh Federal Reserve District. They also can be obtained from state agricultural colleges.

plots were not sprinkled, and no rainfall occurred until June 19.

In addition to obtaining data on the percentage emergence of the cotton plants, yield information also was obtained. The results of this test showed that, when seed were covered to a depth of 4 inches, they had a significantly lower initial emergence than at other covering depths. However, the final emergence was not lowered significantly. When the cotton seed were covered 1 inch, the yield was significantly higher than when the seed were covered 4 inches.

Check Sorghum Chlorosis

Sorghum chlorosis (iron deficiency) can be controlled if effective measures are taken early enough, agronomists at the Beeville, Texas, Agricultural Experiment Substation report in a recent release.

Continuing work begun in 1951, the agronomists have found that a 2.5 to 5 percent copperas solution, with a wetting agent, applied to plants within 10 days after plant emergence is necessary for effective control of chlorosis. In many areas of the Rio Grande Plain, the successful control of sorghum chlorosis requires that the first application of copperas be made before the plants become stunted. The first spraying should be followed by a second application within 14 days.

Since it is not possible to determine in advance where chlorosis will develop severely enough to stunt young plants, these first two sprayings should be applied over the entire field. Any subsequent spraying should be varied in accordance with field observation. So far, three or four sprayings have resulted in good control of sorghum chlorosis. Third or fourth sprays should be applied only in those areas where yellow-streaked plants develop. This yellowing usually will not develop in less than 14 days, and it may take up to 35 days for it to appear after the second spraying.

Spraying chlorotic plants as late as early head formation will increase grain production. When normal sorghum was sprayed not more than three or four times, the plants were healthier and grew faster than plants in unsprayed rows.

The standard spray used by the scientists was a 2.5 percent copperas solution, plus .01 percent wetting agent. The spray was applied at a rate of approximately 20 gallons of spray per acre. Results of experiments using a 5 percent copperas solution, plus a wetting agent, indicate that this concentration would not reduce the forage production of Early Hegari.

Various soil treatments have been tested in an effort to determine their usefulness in the control of chlorosis. A few of the materials gave some degree of control and maintained a good stand of plants throughout the test plots, but in no case did they compare favorably with a good spray schedule.

Publications

Oklahoma Agricultural Experiment Station, Stillwater:

Studies on Winter Rations for Commercial Beef Cows, Bulletin No. B-418, by A. B. Nelson and others.

The Effect of Harvest Practices on the Performance of Alfalfa, Bulletin No. B-433, by Hugo O. Graumann and others.

Dorman Soybeans for Oklahoma, Bulletin No. B-413, by Ralph S. Matlock.

Crop and Livestock Opportunities on Eastern Oklahoma Prairie Land Farms, Bulletin No. B-430.

Copies of the bulletins may be obtained by request to the publishers.

The *Agricultural News Letter* is prepared in the Research Department under the direction of J. Z. Rowe, Agricultural Economist.