

AGRICULTURAL EXPERIMENT STATION
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SUMMARY of RESULTS from OPERATION of a COTTON-HOG FARM MANAGEMENT
UNIT at the MONROEVILLE EXPERIMENT FIELD, 1942 - 1945

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Four years' operation of a small cotton-hog farm management unit at the Monroeville Experiment Field has paid labor and investment an average yearly return of \$1,922.93, or about \$58 per acre.

Average annual total cash income amounted to \$2,312.85; out-of-pocket costs for fertilizer, seed, and extra labor averaged \$389.92 per year. Sales from the unit's acreage averaged 7-1/3 bales of cotton, a little over 3 tons of cotton seed, and 11,636 pounds of hogs per year.

Purpose. The experiment was begun in 1942 to determine how farm incomes might be increased in southwestern Alabama, where farms are relatively small.

Previous results from plots on this Experiment Field had definitely shown the possibilities of growing good crops of corn, peanuts, crimson clover, oats, and kudzu. Hogs appeared to be the logical livestock for converting these feed crops into additional cash income, because they require less land and labor than most other types of livestock. For these reasons, hogs were combined with cotton.

Cropping system. About 33 acres of crops comprise the unit. The crops and acreages at present are as follows:

- 1) 21 acres in a rotation of 7 acres each of cotton, peanuts, and corn.
- 2) 5½ acres continuously in corn, which is either followed by a winter legume, or fertilized with a commercial fertilizer.
- 3) 5 acres of kudzu (2 areas of 2 and 3 acres).
- 4) 1½ acres of pasture.

The peanut acreage is divided into 3 acres of Spanish and 4 acres of runners.

For winter grazing, oats and crimson clover are seeded in September following the hogged-off Spanish peanuts. The oat-crimson clover area is turned about April 1 and is planted in corn. The 4 acres in runner peanuts are hogged and later gleaned. This area is likewise turned about April 1 and planted in corn.

* Formerly Mimeograph Series

The present pasture area consists largely of native grasses and is used as a holding and farrowing area.

Fertilizer treatments. The 7 acres of cotton are either fertilized with 700 pounds per acre of 6-8-4, or 600 pounds of 4-10-7 and side-dressed with 150 pounds per acre of nitrate of soda.

The peanuts are given no fertilizer treatment.

The oats and crimson clover, which follow the Spanish peanuts, receive per acre 400 pounds of superphosphate and 100 pounds of muriate of potash.

The corn following good growth of winter legumes is not fertilized. All other corn is fertilized at planting time with 200 pounds per acre of 4-10-7 and side-dressed with 200 pounds of nitrate of soda 30 to 40 days after planting.

Hog enterprise. Four sows are used on the unit. They are bred to farrow twice each year -- during March and September. The March pigs are farrowed on oats and crimson clover or on the pasture area. These spring litters are kept on the pasture or kudzu areas until about August 1, when the Spanish peanuts are ready to be hogged. As soon as the pigs completely graze the Spanish peanuts, they are moved to the runner peanuts. The spring-farrowed pigs are ready for market upon hogging off the runners, about November 1.

The September pigs are farrowed on pasture and are kept there until they are weaned. They are then moved to glean the old runner peanut field and graze the crimson clover-oat area. From weaning time until marketed, the fall litters receive a full feeding of corn plus one-fourth pound of protein supplement per pig per day. Usually, these pigs are ready for market in April.

The brood sows must be moved at least four times during the year. Beginning with the spring farrowings, these moves are as follows:

- 1) From pasture to kudzu, about May 15
- 2) From kudzu to pasture, about September 15
- 3) From pasture to crimson clover-oat area, about December 1
- 4) From crimson clover-oat area to pasture, about March 20.

The sows are given a maintenance ration of corn and supplement while on the pasture, and corn only while on the kudzu and crimson clover-oat areas.

This experiment is still in progress. In the 4 years, some changes have been made in the system of cropping, feeding, and operation. No doubt other changes will be made as the experiment progresses.

However, results thus far definitely show that cotton, hogs, peanuts, corn, and grazing crops can be combined to materially increase farm income in the region.