

duce an abundant flow of milk. After the pigs are weaned the sow requires nearly the same ration. It is a common practice with many farmers to put the brood sow on a starvation ration as soon as the pigs are weaned. It is as bad to feed them on corn only. Corn alone may do for fattening an animal, but when fed alone to pregnant sows it does not supply enough protein to properly develop the growing fetus. The result is the sows will farrow small litters of weak pigs. If we wish to maintain a prolific strain of brood sows we must give attention to how they are fed.

EXPERIMENT I.

All of the pigs used in the following experiments were Berkshires. These pigs were not all registered, but they were all eligible to registration.

In calculating the cost of producing a pound of pork in the experiments that follow, the feeds were valued at the prices here given: Corn, \$1.75; shorts, \$1.70; velvet beans in the pod, \$0.30; sweet potatoes, \$1.00; Japanese cane, \$0.20, and sorghum, \$0.20 per hundred.

The first test was conducted with five Berkshire pigs. The test was begun January 29, 1910, and continued for 51 days, closing March 20, 1910. The object of this experiment was to test the value of corn (one part), velvet beans in the pod (one part), and Japanese cane (two parts by weight), for pork production. During the time the pigs were under observation, they were fed shelled corn and velvet beans in the pod, equal parts by weight. In addition, they were given two pounds of Japanese cane for each pound of corn fed. At the beginning of the test the five pigs averaged 118.6 pounds per head, and weighed altogether 593 pounds. At the end of the feeding test they weighed 775 pounds, making a gain of 182 pounds, with an average daily gain per head of 0.71 pounds.

The cost per pound of gain in this test was 8.6 cents. The records show that after feeding the pigs for thirty days they weighed 704 pounds, and the cost per pound of gain was 6.5 cents. From a practical standpoint they should have been sold at that time. When sold at the close of the test the buyer objected that the pigs were too fat to furnish the best quality of pork.

TABLE I.
WEIGHTS AND GAINS.

Weight at beginning of test, January 29, 1910 (5 pigs)-----	Pounds	593
Weight at end of test, March 20, 1910 (51 days, 5 pigs)-----		775
Total gain in 51 days-----		182
Average daily gain-----		0.71
Average daily gain per 1,000 pounds live weight-----		6.02
Pounds of feed to make 100 pounds of gain-----		1406
Cost per pound of gain, \$0.86.		