

likely to condemn the whole test, and say it was a failure, and that the feeds were no good for pork production. But the information obtained from this work is of considerable value to the farmers of the State who are feeding hogs. To know that Japanese cane when fed alone to small pigs is not a maintenance ration, is worth more to the farmers of the State than the cost of the whole experiment.

A glance at Table III will show the weights at the beginning of the test, the weights at the close, and the gain or loss in pounds during the sixty days the pigs were in the test. By examining Table III it will be seen that all lots of pigs were of nearly equal weight. They were also of nearly equal age, being about three months old when the experiment began. At the end of the experiment, sixty days later, Lot IV has lost 61 pounds in weight. This fact was quite evident, and it could easily be seen that the pigs were daily growing smaller and weaker.

It is not necessary to make much comment on this table. It is evident when the ration is composed entirely of Japanese cane, or when as much as two-thirds of the ration is Japanese cane, especially when feeding young pigs, that it will not maintain the original body weight. The reason for this is evident. Although hogs eat a considerable amount of grass and green feeds of various kinds, yet the arrangement and size of their digestive organs is not such that they can handle and digest large quantities of forage, such as Japanese cane. In fact they ate but little of the cane, other than the juice. They would chew a mouthful of cane until nearly all of the juice had been extracted. They would then spit out the refuse, and take a fresh mouthful, and so on. The trouble with the Japanese cane is that it requires too much work from the hogs for what they get out of it. That is, they must work overtime to get enough food to supply their appetites. In feeding velvet beans in the pod, the pigs did not eat any of the pods. They became, in a short time, quite expert in shelling out the beans. The only advantage in feeding the beans in the pod is saving the cost of shelling, which may amount to anywhere from 10 cents to 25 cents per hundred pounds.

### EXPERIMENT III.

In this test, twenty pigs were used. The pigs were separated into four lots of five pigs each. Lot I was fed shelled corn only. Lot II was fed shelled corn and cull velvet beans, equal parts by weight. Lot III was fed shelled corn, cull velvet beans, and shorts, equal parts by weight. Lot IV was fed equal parts of shelled corn and cull velvet beans, and all the green sorghum the pigs would eat. The cull velvet beans were the refuse taken from the seed velvet beans. They were composed of broken beans and small, immature shriveled seed. The beans as they came from the field were put through the huller, and were afterwards screened through a screen of three-eighths inch mesh. All that went through the screen were considered as