

producer must be on the alert to keep up with the improvements in marketing methods by the areas with which he competes. Therefore, he will find it profitable to be especially careful in the harvesting and handling of potatoes as they bruise very easily.

Not all mechanical injury can be avoided, but a large percentage of it can be by more careful handling. The more clean and attractive the potatoes can be made, the higher the price at which they will sell. Too many small potatoes in a lot discourage buyers, and reduce the price received. Keep the small potatoes at home, wash or at least brush the rest and keep bruising to a minimum. Any improvements that a grower makes will be well paid for by the increase in price he receives.

CERESAN POISONING OF SWINE

D. F. Eveleth, Veterinarian, Alice I. Goldsby, Assistant in Veterinary Science

The use of grains treated with Ceresan (ethyl mercury phosphate) as feed for animals is often false economy. Diagnoses of mercury poisoning are made each year on specimens of swine and chickens which have been submitted to this laboratory.

Middleton (1) has recently described acute, fatal poisoning in cattle that had eaten oats treated with Ceresan. In contrast to the acute condition described by this investigator, most of the cases encountered here have been of a chronic type.

The following case history of a drove of pigs illustrates the usual type of Ceresan poisoning in swine. In the latter part of July Dr. O. D. Foss of

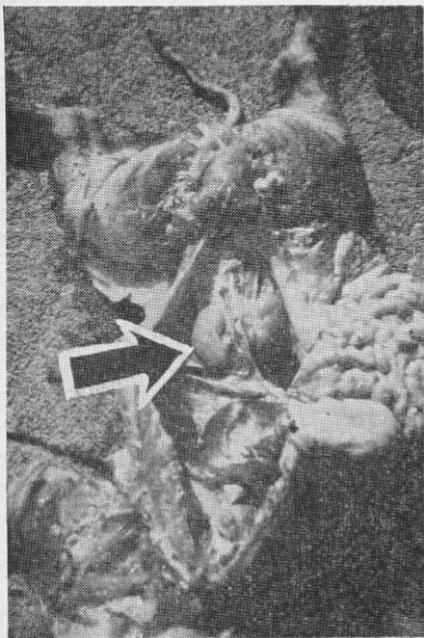


Figure 1.—Ceresan poisoned pig. Photo taken a few days before the pig was destroyed. Note arched back, straight tail and gauntness.

Figure 2.—Ceresan poisoned pig. Note difference in color of liver and kidneys. Kidneys also enlarged and hard.

Christine, North Dakota, was called to vaccinate a drove of swine. The pigs were in good condition at the time of vaccination. On August 25th the owner again called Dr. Foss and reported a marked decrease in their appetites resulting in retarded growth. Dr. Foss examined the pigs taking the body temperatures of a number of those showing more advanced symptoms. All temperatures were normal or subnormal.

He killed one of the pigs for post mortem examination. It showed a mild inflammation throughout the intestinal tract; very light, "rubbery" kidneys; and an extremely hard, purple liver. Dr. Foss submitted a live pig and the carcass of the dead one to this laboratory where a diagnosis of chronic poisoning was made. Dr. Foss questioned the owner of the pigs regarding the feed and learned that the animals were being fed Ceresan treated oats.

The live pig was kept for further observation and penned with three other pigs. A good growing ration was fed to all of them. They all grew well except the poisoned one. It showed a continual decline in weight, the appetite was poor, and atrophy of the muscles became noticeable (Fig. 1) before the pig was destroyed on October 20. The lesions were similar to those observed in the first case. Fig. 2 shows the enlarged and hardened kidneys.

Farmers often report the feeding of Ceresan treated grain to chickens without ill effects. The owner of the drove of swine discussed above reported that his neighbor had been feeding Ceresan treated grain to his chickens without ill effects. In many instances this appears to be the result of diluting the toxic grain with normal feed to the point where the actual amount of mercury consumed is small. Ceresan is poisonous to poultry as well as mammals.

We have records of cases where Ceresan treated grain has been used in commercial feeds. This practice is dangerous and should be discouraged.

The individual farmer can best utilize his Ceresan treated seed by planting such treated seed for a summer forage crop. This is much safer than using the grain for feed.

(1) Middleton, K. B. 1947—Ethyl Mercury Phosphate Poisoning in Cattle—*Veterinary Medicine*, Vol. XLII, No. 10.

Inspection and Eradication of Bee Disease: The bee inspection program is by law established in the State Department of Agriculture and Labor. Since this law was enacted in 1925 it has been the duty of the Experiment Station entomologist to serve as State Bee Inspector in directing the inspection of beeyards for American foulbrood.

During the past year (1947) a total of 9,065 hives of bees were inspected in seventeen counties of the state; 73 of these hives were found to be diseased with American foulbrood and were destroyed. J. A. Munro.