

## TESTS ON THE SEED OF LEAD PLANT AS A FEED FOR CHICKENS AND PHEASANTS<sup>1</sup>

by

D. F. Eveleth<sup>2</sup>    A. I. Goldsby<sup>3</sup>    O. A. Stevens<sup>4</sup>

The lead plant, *Amorpha fructosa*, is frequently used in shelter belt planting. At times these plants produce rather heavy yields of seed. The question arose as to the feed value and possible toxicity of these seeds for domestic poultry and upland game birds.

Baby chicks, half grown chickens, mature chickens and mature pheasants were offered the intact seeds both alone and in mixtures with grains. In all cases the amorphia seeds were either left in the feed container or picked out and discarded.

When the amorphia seeds were finely ground and mixed in a good growing mash at a level of 10 percent or more of the mash the mixture caused death of baby chicks and in some cases of half grown chickens. Mature chickens and pheasants would survive on this ration but in all cases there was a marked loss of weight. The toxic product in the amorphia seed produced the following lesions: Anemia and emaciation were always encountered. There was necrosis of the liver in most cases which in prolonged feeding experiments caused severe jaundice. In some cases there were excessive deposits of urates in the kidneys. In some cases the small intestine showed a catarrhal enteritis.

Since all birds tested refused to eat the amorphia seeds unless compelled to by incorporating the ground seeds in a mash feed, there seems to be little danger of poisoning either chickens or pheasants under natural conditions. On the other hand the amorphia plant would not furnish winter feed for pheasants because of the failure of the birds to eat the seeds.

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<sup>1</sup>Progress report on Hatch Project No. 30 "Properties and Behavior of Wild Indigo" (*Amorpha* spp).

<sup>2</sup>Veterinarian

<sup>3</sup>Assistant in Veterinary Science

<sup>4</sup>Botanist