In countries where sorghum is important it has been known for many years that this crop frequently causes the death of cattle when they are allowed to eat it in the green state. Pease (13) states that in India the year 1877 was marked by the death of great numbers of cattle due to eating sorghum. The season was especially dry and the crop was "semi-parched for want of rain." Sorghum poisoning was frequent also in 1887 and 1895, which were years of drought. The natives believed that the sorghum plant became poisonous in dry years when attacked by a small insect which they called "bhaunri." The idea was that the cattle were poisoned by eating this insect. Other theories advanced included the belief that the sorghum leaves collected in the paunch and, by giving off gases, caused death by asphyxiation similar to hoven or bloating.

Pease, in studying the matter in 1895, decided that the death of cattle was due to the consumption of nitrate of potash. He found in the stems of some withered sorghum plants as much as 25 percent of this salt, it being particularly abundant at the nodes. The symptoms of poisoning from nitrate of potash are somewhat similar to the symptoms of prussic acid poisoning. This theory of Pease was disproved later, or at least it was found that it was not the cause of death in most cases of sorghum poisoning.

In the United States the fact that cattle were poisoned by eating green sorghum was recognized by Hiltner (10) of the Nebraska station in 1900. This investigator made a chemical study of sorghum plants taken from a field which had caused the death of cattle, but failed to find the prussic acid, which no doubt was present. He found no substance in the plants which could have caused the death of the cattle and concludes as follows:

1 Contribution from the Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C. Received for publication November 30, 1920.
3 Reference by number is to "Literature cited," p. 279.

267