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UNITED STATES DEPARTMENT OF AGRICULTURE. DEPARTMENT CIRCULAR 82.

Contribution from the Bureau of Animal Industry. JOHN R. MOHLER, Chief.

A NEW SHEEP-POISONING PLANT OF THE SOUTHERN STATES.

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Within the last two years the attention of the United States Department of Agriculture has been called to a plant, growing in the Southern States, which seems likely to be of great importance as a cause of stock poisoning. It is known to botanists as *Daubentonia longifolia*. In some sections it is popularly known as "Coffee bean," but this term is applied also to a number of other plants. There is no popular name in general use.

The plant, shown in the illustration, is a shrub or small tree belonging to the pea family, which includes locusts and mesquites. The leaves are alternate with 12 to 60 leaflets, and the flowers range from scarlet to a bright yellow. The pods, shown in the illustration, have a peculiar form, having four wings, while the seeds are separated from one another by cross partitions in the pods. The plant grows in the Gulf region and in Texas, and extends as far north as the northeastern border of that State. It is said to be very abundant along the lower Rio Grande and in the neighborhood of San Antonio.

All the reported cases of stock poisoning have been in Texas, but it is possible that cases may occur also in other localities.

ANIMALS POISONED.

All the known cases of poisoning have been of sheep and goats. It is probable that, under suitable circumstances, cattle also would be affected.

SYMPTOMS.

In light cases the main symptom is depression, generally accompanied with diarrhea. When animals are fatally poisoned there are no pronounced symptoms, but the animals become weak, the breathing is labored, and they die with very little struggling. It should be noted that the symptoms ordinarily appear a considerable time after the eating. Sometimes a full day may elapse.

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The poisonous plant *Daubentonia longifolia*, known in some parts of the country as "Coffee bean."

QUANTITY NECESSARY TO POISON.

A little more than an ounce of the seeds may poison a sheep, and it may be killed by less than 2 ounces. The pods have little, if any, poison. As sheep on the range eat the pods and seeds together, they may eat a considerable quantity before they get the 1 or 2 ounces of seeds necessary to poison.

PART OF PLANT POISONOUS.

It is not known that the green plant does any harm. So far as present knowledge indicates, the danger from the plants is entirely from the seeds, and the cases of poisoning occur in the winter, and, generally speaking, in areas where feed is scanty.

TREATMENT OF POISONED ANIMALS.

Little can be done in the way of remedies. Laxatives like Epsom salt aid in the elimination of the poison. The main reliance must be in prevention. It must be remembered that if hungry sheep are trailed where this plant is abundant, bad results must be expected.

It is always bad economy to keep animals on short feed, for when this is done they will eat poisonous plants if they have a chance. If the herders know that Daubentonia is poisonous, ordinarily they can handle the flocks so as to avoid losses.

It should be remembered that the effects of Daubentonia poisoning continue for several days, so that animals that are poisoned and do not die require especial care until after full recovery.

Additional information regarding plants poisonous to live stock may be obtained on application to the Department of Agriculture.

PUBLICATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE RELATING TO THE PLANT POISONING OF LIVE STOCK.

AVAILABLE FOR FREE DISTRIBUTION.

Larkspur or Poison Weed. (Farmers' Bulletin 988.)

The Loco Weed. (Farmers' Bulletin 1054.)

Oak-Leaf Poisoning of Domestic Animals. (Department Bulletin 767.)

White Snakeroot or Richweed (Eupatorium Urticaefolium) as a Stock-Poisoning Plant. (A. I. Leaflet 26.)

Poisoning of Live Stock by Oak. (A. I. Leaflet 32.)

Notes on Larkspur Eradication on Stock Ranges. (A. I. Leaflet 34.)

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, GOVERNMENT PRINTING OFFICE, WASHINGTON, D. C.

Lupines as Poisonous Plants. (Department Bulletin 405.) Price, 10 cents.

Stock-Poisoning Plants of the Range. (Department Bulletin 575.) Price, 50 cents.

Stagger Grass (Chrosperma Muscaetoxicum) as a Poisonous Plant. (Department Bulletin 710.) Price, 5 cents.

