USDA United States Department of Agriculture

Illinois Grazing Manual Fact Sheet

SPECIES • POISONOUS PLANTS

# Pigweed

***Plants of fencerows, roadsides, barnyards, fields, and waste places.***

## Description

*Amaranthus retroflexus L.:* Pigweed is an erect, branched, stout-stemmed annual herb that grows up to 7 feet tall. The stem, which is clothed with fine hairs, supports alternately arranged, egg-shaped leaves with long leaf stalks. The flowers are aggregated into terminal clusters of several to many short (2 to 8 inches long), ovoid, blunt, densely crowded spikes that terminate the stems but also arise form the upper leaf axils. The individual flowers are very small (1/4 inch-long), lack petals, and are subtended by rigid, pointed bracts that are longer than the calyx. The fruit is a compressed, small, bladdery, 1-seeded structure less than 1/8 inch in diameter that opens along a circular line. The seeds are small (about 1/16 inch across), round, and dark red-brown.

## Occurrence

A native of tropical America, pigweed ranges from Prince Edward Island, Canada, west to the Pacific Ocean, and south beyond the boarders of the United States.

## Conditions of Poisoning

Pigs with continuous access to this plant rarely eat enough to be poisoned. But, when pigs raised in confinement are allowed to graze a pasture containing pigweed, they may become poisoned. The poisoning is not acute and the pigs may not show clinical signs until one week after exposure to the plant. About one-half of the animals will be affected. Mortality is usually low.

## Toxic Principles

Nitrate and oxalate up to 30 percent or more expressed as oxalic acid have been found in pigweed. Although oxalate has not definitely been identified as the cause of the edema and clinical signs, it is suspect in this type of poisoning.

## Clinical Signs

There is rapid onset of weakness, trembling, and incoordination 5 to 10 days after initial access to the weed. Soon there is knuckling of the pastern joints and almost complete paralysis of the pelvic limbs. Affected pigs usually maintain an attitude of sternal recumbency, followed by coma and death. If disturbed, they may drag themselves with the front legs. Edema in the caudal-ventral area of the abdomen is observed in most cases. The body temperature remains normal.

more ►

## Necropsy

There is usually edema of the connective tissue around the kidneys, with considerable blood in the edema fluid, and edema of the ventral abdominal wall and perirectal area. The kidneys are normal in size and pale in color, with scattered areas of hyperemia extending into the cortex. Congestion and hemorrhage in the kidney cortex have been reported in a few cases.

## Treatment

Remove animals from the source of the weeds. Medicinal treatment has not been found satisfactory.

## References

Evers, Robert A., and Roger P. Link. Poisonous Plants of the Midwest and Their Effects on Livestock, 1972. Special Publication 24, College of Agriculture, University of Illinois at Urbana-Champaign.





USDA United States Department of Agriculture
Natural Resources Conservation Service

UNIVERSITY OF ILLINOIS EXTENSION
College of Agriculture, Consumer and Environmental Sciences

Illinois Department of Agriculture

ILGLCI
Illinois Grassland Conservation Initiative