



Star-of-Bethlehem



Photo by: Robin R. Buckallew
Hosted by the USDA-NRCS
PLANTS Database

Usually found in dry, open pastures and meadows.

Description

Ornithogalum umbellatum L.: Star-of-Bethlehem is a plant with a leafless stalk that is 4 to 12 inches tall and several very narrow, channeled leaves that arise from a bulb. Three to 7 flower stalks grow from the leafless stem, and each stalk supports a single flower that is 3/8 to 3/4 inch long, with 6 segments that are white above and have a broad green stripe beneath. The fruits are capsules containing a few dark, roundish seeds.

Occurrence

A native of Europe, star-of-Bethlehem was cultivated in gardens in North America and has escaped to fields and roadsides. It is naturalized from Newfoundland to Ontario and Nebraska, south to Mississippi, Missouri, and Kansas.

Conditions of Poisoning

Poisoning occurs only when the bulbs are brought to the surface by frost-heaving, plowing, or rooting by swine.

Toxic Principles

Although the toxic principle has not been definitely identified, it appears to be similar to the alkaloid colchicines. It seems to be present only in the white onion-like bulbs.

Clinical Signs

The clinical signs are depression, salivation, bloating in ruminants, vomiting, diarrhea, labored breathing, rapid pulse, and bloody urine. Death results from respiratory failure.

Necropsy

Extensive gastroenteritis and hemorrhage in the kidney are the significant lesions. Blood may be found in the intestines.

Treatment

Because of the extensive loss of body fluids and electrolytes, therapy for the hypovolemic shock-like state is indicated. Blood transfusion and parenteral administration of electrolyte solutions are recommended. There is no antidote for the toxin.

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.