

Sesbania *Sesbania exaltata*



Annual herb, 0.7 to 2 m tall, becoming quite woody at base. Leaves alternate, evenly pinnately compound; leaflets 20 to 70, oblong to linear elliptic, 1 to 3 cm long, entire. Flowers yellow, often streaked with purple, to 1.5 cm long, borne in axillary clusters of two to six flowers each. Pods linear, 10 to 20 cm long, 3 to 4 mm broad, each containing 30 to 40 seeds. Found mostly in Coastal Plain from Virginia to Florida to Texas; most abundant along ditches, on stream banks, and in low fields and waste places.

Toxicity

The poisonous principle is a saponin that is toxic to livestock and humans. The seeds are the most toxic part of the plant and are consumed in the late summer, fall, or winter when other forage is scarce. Cattle are often affected when moved into new pastures containing the plant. Cattle often develop a craving for the seeds.

Symptoms

Affected cattle are often found dead. An opened rumen may reveal the sprouted seeds, and there will be a hemorrhagic inflammation of the abomasum and intestines. Symptoms are variable and include hemorrhagic diarrhea, but constipation can also occur. The animals walk stiffly with an arched back, have shallow respiration and a weak rapid pulse. They become prostrate and comatose before death.

Treatment

Symptomatic. In severe diarrhea, insert a stomach tube and administer intestinal protectives. If animals are constipated, give mineral oil by the same route. Administer intravenous fluids in dehydrated animals. Use dilute vinegar to counteract saponin in the early stage of the toxicity.

Rattlebox *Sesbania punicea*

Shrub or small tree to 4 m tall. Leaves alternate, deciduous, 10 to 20 cm long, evenly pinnately compound with 12 to 40 leaflets. Flowers conspicuous, orange to red, shaped like a sweetpea, 2 to 2.5 cm long, in drooping axillary clusters. Pods four-winged, 6 to 8 cm long, indehiscent, tough and somewhat leathery. Found in lower Coastal Plain from Florida to Louisiana; most abundant in moist, fertile soils, marshes, pastures, and waste places and along ditches and fence rows; planted as an ornamental and widely escaping.

Toxicity

The seeds contain a saponin that is quite toxic to poultry, cattle, sheep, goats, and humans. As few as nine seeds per bird can be fatal. Sheep can be killed by consuming as little as 50 grams per 100 pounds of body weight. Poisoning usually occurs in the fall when other forage is scarce.

Symptoms

Animals appear severely depressed and have a rapid pulse and diarrhea.

Treatment

Give saline purgatives. Specific antidote is dilute vinegar in early stages of toxicosis to counteract saponin.