

Showy crotalaria *Crotalaria spectabilis*



Annual herb, 0.2 to 0.5 m tall, puberulent to glabrate. Leaves simple, alternate. Lower leaves spatulate, 2 to 3 cm long, 6 to 15 mm wide; upper leaves oblanceolate, 3 to 6 cm long, 4 to 10 mm wide. Stipules conspicuous, tardily deciduous, fused to stem. Flowers showy, 1.5 to 2.5 cm long, yellow, in terminal racemes. Widely distributed from Florida to Texas in Coastal Plain and Piedmont; abundant along roadsides, in fields, and in waste places; once cultivated as a green manure crop. [Inset: fruit]

Toxicity

The toxic principle is the alkaloid monocrotaline. Chickens, horses, cattle, and swine are the species usually affected, but sheep, goats, mules, and dogs can be affected to a lesser degree.

All parts of the plant are poisonous, whether green or dried in hay. The seeds are especially poisonous. Poisoning occurs when animals consume the green plant, hay contaminated with crotalaria, or dried seed in harvested grain.

Symptoms

Chickens can die from eating as few as 80 seeds. Fatalities may occur within a few days or up to several weeks after ingestion. Symptoms include diarrhea, a pale comb (signifying anemia), ruffled feathers, and depression. Quail are also easily poisoned, but turkeys are more tolerant.

Horses develop chronic unthriftiness, become uncoordinated, walk aimlessly, and may "head press" against objects. Mucous membranes often exhibit jaundice, related to severe liver damage.

In cattle, three syndromes are recognized: acute, chronic, and intermediate types. The chronic type is most commonly seen with animals dying several months after consuming the toxic material, usually hay contaminated with crotalaria. Symptoms include bloody diarrhea, icterus, rough hair coat, unthriftiness, edema, and weakness.

Swine may exhibit either an acute form, characterized by sudden gastric hemorrhage and death, or a chronic form with anemia, ascites, loss of hair, and unthriftiness.

Treatment

There is no specific treatment.