Johnsongrass *Sorghum halepense*

Coarse grass up to 2 m tall with stout rhizomes, appearing in dense clumps or nearly solid stands. Leaves on vigorous plants up to 0.6 m long and 3 cm wide, pilose on upper leaf surface near the base. Panicle often appearing purplish, up to 0.6 m long and 0.2 m broad. Spikelets 4 to 6 mm long, each enclosing a 2 mm long grain. Found throughout the South; most abundant in fields, waste places, and fence rows and on ditch banks. Particularly abundant in rich delta lands such as in Mississippi. Once widely cultivated as a hay and pasture crop.

Toxicity

Under conditions of drought, trampling, frost, or second growth, the plants may contain cyanide. In addition, if plants are heavily fertilized with nitrogen and drought stricken, nitrate poisoning can occur in animals that eat the grass.

All animals can be poisoned by cyanide, but ruminants are more susceptible. Nitrate poisoning occurs most commonly in ruminants, although cases of nitrite poisoning have occurred in monogastric animals.

Symptoms

Cyanide poisoning is very acute, and affected animals exhibit difficult breathing, anxious expression, staggering and usually become recumbent, have convulsions, and die. Animals may show signs within 15 to 30 minutes after consuming plants containing cyanide and may die within 1 hour of consuming plants. The blood is usually bright red.

In nitrate poisoning, the symptoms are similar except the blood is characteristically chocolate brown.

Treatment

For cyanide poisoning, use sodium thiosulfate and sodium nitrite given intravenously as an antidote.

For nitrate poisoning, use methylene blue as an antidote.

Prevention

Be careful when allowing cattle to graze johnsongrass, sorghums, etc., that have been frosted, wilted, trampled, or drought stricken.

Ensile plants containing cyanide, or cut for hay. Drying eliminates most of the cyanide.

Analyze hay if you suspect that it may contain nitrate.