

Spotted water hemlock *Cicuta maculata*



Glabrous, branching perennial herb, 0.6 to 2 m tall, with purple-striped or mottled, glabrous, hollow stems arising from fibrous or fleshy roots. Lengthwise splitting of the juncture of the stem and roots shows the center is hollow with broad partitions of pithy tissue. Leaves alternate, pinnately, bipinnately, or pinnate-ternately divided, uppermost leaves not dissected. Flowers white, borne in compound, flat-topped umbels at the ends of stems and branches. Fruits ovoid, prominently ribbed, two-parted, 2 to 4 mm long. Found throughout the South, but seldom common; in swamps, stream banks, marshes, wet pastures, and roadside ditches.

Toxicity

A very poisonous alkaloid and a resinoid toxin are found in all parts of the spotted water hemlock, but primarily in the roots. The pithy area between the nodes contains a greenish yellow oil, which contains the toxins.

Livestock and humans are especially susceptible to this poison. The plant grows in wet, damp soil, which enables animals to easily pull up the plant. Most livestock poisoning cases occur in the springtime; children have been poisoned by making “pea-shooters” from the hollow stem segments.

Symptoms

Animals exhibit nervous symptoms because of the toxin, which is a convulsant. Trembling and jerking motions are followed by convulsions. In addition, animals froth at the mouth, move jaws as if they are chewing, and may vomit. Eyes are widely dilated, and temperature is elevated. Death occurs from respiratory failure. Chronic ingestion may lead to abnormal fetal development and malformation in swine and horses.

Treatment

Nonspecific. Treat symptoms.

Poison hemlock *Conium maculatum*

Glabrous, branching biennial herb, to 2 m tall, with hollow spotted stems arising from a thick taproot. Very similar to the much more poisonous *Cicuta maculata* and often confused with it. However, poison hemlock usually has only one fleshy taproot; there are no pithy partitions in a hollow area at the juncture of stem and root; and stem and upper stem leaves are divided. Probably more common than spotted water hemlock and found in drier, more upland habitats.

Toxicity

The poison hemlock contains coniine, an alkaloid, and other compounds that are capable of poisoning livestock, poultry, and humans. The stems, leaves, and mature fruits are toxic. The leaves are more dangerous in the springtime, and the fruit is the most dangerous in the fall.

Symptoms

Symptoms are gastrointestinal irritation, nervousness, trembling, staggering, coldness of the extremities, and slow heartbeat. Eventually coma and death occur.

Treatment

Use respiratory stimulants or intestinal protectives.