WATER HEMLOCK

Tier 3

Overview

Water hemlock is one of the deadliest poisonous plants in North America. It contains a toxin called cicutoxin, a violent convulsant, which acts as a stimulant in the central nervous system. Ingestion of hemlock can be fatal, and symptoms can occur 15 minutes to 6 hours after the plant has been ingested.

Initial symptoms may include the rapid onset of seizure activity along with nausea, vomiting, muscle twitch, increased pulse, excessive salivation or frothing at the mouth, and dilation of the pupils. Deaths usually occur from respiratory paralysis a few hours after ingestion.

Habitat

Typically, a wetland plant, common on pastures or tilled areas. This plant occurs in wet, fertile soils at the edge of waters, along streams, and irrigation canals. It is most common in deep loam, clay loam, or clay soils.

Identification

A perennial plant that grows to a height of 3 to 7 ft tall.

Stems: Branching, smooth, hollow and often with purplish-green striations.

Leaves: Leaves are up to 15 inches long, alternately-arranged, and tri-pinnately-compound with numerous 2 – 5 inch ovate leaflets. They are also sharply toothed. The leaf veins terminate at the bottom of leaf serrations and not at the tips, which helps to identify this plant.

Flowers: The flowers are white and tiny, have 5 petals and 5 stamens that grow in umbrella like clusters 2 to 8 inches across. The plant flowers in spring or early summer.

Roots: Tuberous root with rootstalks that are multi-chambered and contain a yellowish oily liquid. This poisonous liquid is said to smell like raw parsnip.

Similar Species

Water parsnip, like hemlock grows in similar habitat near water edges. Both have clusters of white flowers, water parsnip has bracts (leaf like structures) at the base of flowers and the main flower head, where water hemlock only has bracts at the base of each small flower cluster. Another way to differentiate water parsnip from hemlock is that its leaves are once compound whereas water hemlock's leaves are three times compound.