



Ohio Buckeye



Plants of wooded and old woodland pastures

Plant Characteristics

Aesculus glabra Willd.: The Ohio buckeye is a medium-sized tree that sometimes grows to heights of 70 feet but is usually shorter. The bark of young stems and branches is dark-brown and scaly; on old trunks, it is ashy gray, furrowed, and broken into plates. The oppositely arranged, palmately compound leaves have a slender petiole from 4 to 6 inches long and 5 (rarely 7) obovate leaflets. The yellowish-green flowers are borne in large clusters at the ends of the branches and appear in April or May after the leaves are expanded. The fruits are spiny-roughened, globular capsules that contain 1 to 3 large, glossy, chocolate-colored nuts, each with a whitish scar.

Occurrence

Ohio buckeye prefers the rich soil of river bottoms and banks of streams. It ranges from Pennsylvania to southern Michigan, southern Wisconsin, and eastern Nebraska, south to Alabama, Arkansas, and Oklahoma.

Condition of Poisoning

Sprouts, leaves, and nuts of the Ohio buckeye have caused illness or death of cattle, sheep, and hogs when these animals were pastured where sprouts were present and where other forage was scarce. The young sprouts and the seeds are especially poisonous. Poisoning does not always follow when animals feed on the tree. In experimental feeding, signs of poisoning appeared in only a small number of animals.

Control

Until grass or other forage is abundant, animals should not be allowed to graze in woodland pastures where there are buckeye sprouts. Sprouts and seedlings should be grubbed out of pastures. If the trees are few, as they usually are, it may be advisable to collect the nuts to keep hogs from getting them. Ohio buckeye has little commercial value. Since the tree is uncommon, however, it should not be destroyed unnecessarily.

Toxic Principles

The poisonous principle in the Ohio buckeye is a narcotic alkaloid. It is apparently different from the glucosides aesculin and fraxin found in the bark of the European horse chestnut.



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Clinical Signs

Ohio-buckeye poisoning affects the central nervous system. Prominent signs are an uneasy or staggering gait, weakness, severe trembling, and sometimes vomiting. Coma usually precedes death. Dilated pupils and congestion of the visible mucous membranes are commonly observed. Colic has been reported in poisoned horses.

Treatment

Poisoning caused by Ohio buckeye is rarely fatal, but a veterinarian should be called to give stimulants and purgatives.

References

Evers, Robert A., and Roger P. Link. Poisonous Plants of the Midwest and Their Effects on Livestock, 1972. Special Publication 24, College of Agriculture, University of Illinois at Urbana-Champaign.



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