

Yew Poisoning in Sheep

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The genus *Taxus* consists of three commonly grown ornamental shrubs: English yew (*Taxus baccata*); Canada yew (*Taxus canadensis*); and Japanese yew (*Taxus cuspidata*). The needles and seeds of all yews are highly poisonous to sheep and other livestock. However, the red fleshy seed covering is not poisonous. Deer, moose and elk browse on yews as winter food and are not affected by the yew toxin. Humans, particularly children, are also susceptible to the toxins in these plants.



The yew is known as the “tree of death”. Yew species contain a number of toxic alkaloids, the most toxic of which are taxine A and B. They are collectively referred to as ‘taxine.’ The toxin mainly affects the heart. Livestock are accidentally poisoned when yew trimmings are thrown onto manure piles, compost piles or over the fence where they are easily accessible to sheep and other livestock.

Yews are toxic all year round. Fresh and dried yew are both toxic. Consumption of as little as 1-10 g/kg of body weight for ruminants is lethal. This means that for a 150 lb ewe, 0.2 lbs to 1.5 lbs of yew is all that is needed to be fatal.

Clinical Signs

Sudden death, often within two to three hours of ingestion, is the most common observation with yew poisoning. Animals are often found dead next to yew bushes or clippings. Other causes of sudden death in sheep include: copper poisoning, Clostridial diseases, botulism and bloat. Prior to death, muscle trembling, incoordination, nervousness, difficulty breathing, slow heart rate, diarrhea and convulsions may be observed. No post-mortem signs are specific to yew poisoning, unless partially digested twigs and needles are found in the mouth and stomach. There is no specific treatment or antidote for yew poisoning. Supportive therapies frequently have poor success rates and depend on the amount of yew ingested and how quickly actions are taken.

Identifying Yew Evergreens

The native yew species include: the Canada yew a shrub found in eastern Canada; and the Western yew, a medium tree up to 20 metres high found on the west coast. Various yews are common as landscape ornamentals and include: the English yew, a tree/shrub that can grow up to 25 metres high, and the Japanese yew, a smaller shrub. Yews can withstand trimming and shaping and are easily transplanted. They can tolerate urban pollution but not road salt. All are poisonous to livestock, horses and humans.



Yews are evergreens, with flattened, somewhat curved, needle-like leaves. The leaves are 15 to 30 mm long with a prominent mid-vein. The upper surface is dark green with a paler green underside. The tip of the leaf is sharp. The edges appear to roll under. Leaves are spirally arranged as doubles, appearing to emerge from the stem on three sides. The bark is thin and scaly and varies from dark reddish brown to purplish brown. Yew seeds are hard, dark blue, about 8 mm long, and set inside a reddish, fleshy, cup-shaped, berry-like fruit. Seeds are found on the underside of recent twigs.

Evergreen branch clippings of yew are sometimes used to make Christmas ornaments, such as wreaths and hanging decorations. Wreaths of yew should never be hung on barn doors or on fence posts where sheep or other livestock can reach them.



References

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