



Coyotillo

Karwinskia humboldtiana

Coyotillo is a spineless woody shrub or small tree of the buck-thorn family. Plants on rangelands are generally 1 to 5 feet tall, with crown diameters up to 10 feet.

The most distinctive feature of this plant is the leaves, which are opposite and have prominent veins ending at the leaf's untoothed margin. Small greenish flowers, produced in the leaf axils, have a five-lobed calyx, five petals, five stamens and a compound pistil.

The ovary develops into a brownish-black, oval-shaped fruit or berry. The berries mature in late summer and fall.

Distribution and habitat

Coyotillo grows along arroyos and canyons and on gravelly hills and ridges. It is found from southwest Texas into Mexico and southern California. Regions: 2, 6, 7, 10.

Toxic agent

Coyotillo contains polyphenolic compounds thought to be responsible for its toxicity. This plant is toxic to cattle, sheep, goats, hogs and fowl; cattle are the most susceptible. Native Americans knew that the berries from this plant produced paralysis in humans.

Consumption of 0.05 to 0.3 percent of an animal's weight in seeds will produce poisoning. The leaves are much less toxic, requiring consumption of 15 to 21 percent of the animal's weight for poisoning. Seeds and leaves produce two different poisoning syndromes.

There is usually a lag period of days or weeks between seed ingestion and the appearance of livestock signs. Problems from browsing this shrub occur most often in fall and winter.

Livestock signs

- Signs of seed ingestion include:
- Exaggerated high stepping
 - Jumping or moving backward
 - Weakness and incoordination of hind legs
 - Dragging motion while walking
 - Complete prostration
 - Death
- Signs of foliage ingestion include:
- Loss of condition
 - Wasting
 - Nausea
 - Progressive weakness
 - Death

Integrated management strategies

No effective medical treatment is known for coyotillo poisoning. Few animals paralyzed from eating the seed recover under range conditions.

Do not turn animals (especially goats) unfamiliar with coyotillo into infested areas when this shrub is in fruit. Proper stocking and good supplemental feed and mineral programs help reduce the incidence of poisoning.



Leaf and berries ↗

Whole plant ↓

