

Effective Horse Management – Best Practices Series

Toxic Plants and Horses – Concerns and Prevention

Jenifer Nadeau, M.S., Ph.D Associate Professor, Equine Extension Specialist Department of Animal Science

Many horse owners have concerns about plants found in their pastures. They worry that these plants may be poisonous to their horses. In general, the horse usually has to consume a large quantity of a specific toxic species for it to be an issue. However, a few ornamental plants are toxic even in small quantities, such as only a couple of mouthfuls. Prevention is the best approach to dealing with plant toxicity in horses. There are some things you can do to prevent your horse from having an issue.

Most toxic plants must be consumed in large quantities before clinical signs appear. An example is bracken fern which becomes toxic after the horse consumes a diet of 3-5% bracken fern for at least 30 days. Your horse taking a quick bite on the trail ride is unlikely to be toxic. On the other hand, some ornamental plants are extremely toxic. Oleander is the most toxic, with consumption of 0.005 percent of a horse's body weight in oleander (that is 0.05 lbs or 0.8 oz of oleander for a 1,000 lb horse to help you keep this in perspective), being a lethal dose (meaning it will kill the horse). Yew, another ornamental plant, has a lethal dose of 0.1 to 0.5 percent of body weight (1 to 5 lbs of yew for a 1,000 lb horse). Rhododendron has a lethal dose of 0.2 percent of body weight (2 lbs of rhodo for a 1,000 lb horse). Milkweed, commonly found in CT, has a lethal dose of 0.05 to 2 percent of body weight depending on the variety (lethal dose of half a pound to 20 lbs). On the other hand, the horse must consume a diet of 25% dry matter in onions, which is very unlikely. Red maple also concerns horse owners but the horse must consume the wilted or dried leaves such as those found after a storm and the fatal dose is 6.6 lbs, with a poisonous dose of 3.3 lbs.

Rather than talking more about what signs we would see, let's focus on preventing horses from getting sick or even dying from consuming toxic plants. Here are some ideas for plant toxicity prevention:

- When in doubt, avoid the horse having contact. Try not to let the horse eat things other than its normal diet.
- Have your neighbors come for a visit and tell them in a friendly way never to feed your horse any clippings from their yard.
- **U** Obtain hay from a reputable farmer.
- Keep your pasture strong and healthy by doing soil testing, adding fertilizer if needed and removing any weeds early before they get established. You can remove them mechanically, or by applying an herbicide, carefully following the instructions on the label.
- Make sure your horses have sufficient forage either through a free choice supply or using slow feeders made with smaller openings to allow easy keepers to eat more continuously.
- Before planting any plant, do some research and see if that plant is toxic to horses.
- Make sure you know the source of your shavings. Avoid black walnut since bedding with as little as 5-20% of black walnut shavings can result in laminitis in horses.
- After a storm or whenever you see them, remove dried and wilted maple leaves from your horse's pasture.

Although individual horses may have some strange tastes for certain plants, in general taking these steps can help you keep your horse safe. Availability and quality of forage (pasture and/or hay) definitely plays a role by giving them something safe to consume. There should be no need to go out and chop down all of your maple trees.

By keeping these tips in mind, you should be able to keep your horse safe from plant toxicity. A little prevention can really help prevent your horse from becoming ill or dying needlessly. Thanks, and have fun with your horses!

Sources and Resources

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Reviewed by:

Dr. Debra Hagstrom, Horse Extension Specialist University of Illinois