

Toxic Weeds and Poisoning

with **Dr Elizabeth Wylaars**
Intern Veterinarian
at WestVETS Animal
Hospital



Elizabeth qualified from Massey University in New Zealand in 2022 and has recently moved to Queensland to work as an intern at WestVETS. She has a background in horses and wishes to become an equine practitioner in the future, with interests in sport horse and internal medicine.

There are many plants found in Australia that can be toxic to horses, and some take only low levels of consumption to cause an effect. Being able to identify these plants, and knowing what to do if you suspect your horse has ingested them can be an invaluable skill to have as a horse owner.

Prunus

Prunus is a deciduous tree/shrub that has many species growing throughout Australia. It is commonly found growing as orchard fruits or as an ornamental garden shrub and produces pink or white blossoms. Prunus plants are highly toxic to horses and only small quantities need to be ingested for poisoning to occur.

Symptoms of intoxication include:

salivation and rapid breathing, which is followed by difficulty breathing, muscle twitching, a fast heart rate and weakness and staggering. Horses that have prolonged periods of exposure may develop ataxia and have urinary incontinence.

Prunus



Patersons Curse

Native to the Mediterranean region, Paterson's curse is a noxious weed in all Australian states except Queensland and the Australian Capital territory. It is found on roadsides, pastures, parklands and gardens and is usually unpalatable to horses, but may be ingested if the horses have no alternative forage. This plant grows in winter where it can reach 90cm in height, and all parts of it are toxic, including when dried (e.g in hay). It flowers in spring, producing multiple upright stems with smaller narrower leaves, and tube-shaped purple/blue flowers.

Symptoms of intoxication include: in acute poisoning, you can see death occurring suddenly, often with little signs of prior illness. You may see dullness and a loss of appetite, and signs of respiratory distress. In chronic poisoning, the signs are due to underlying damage

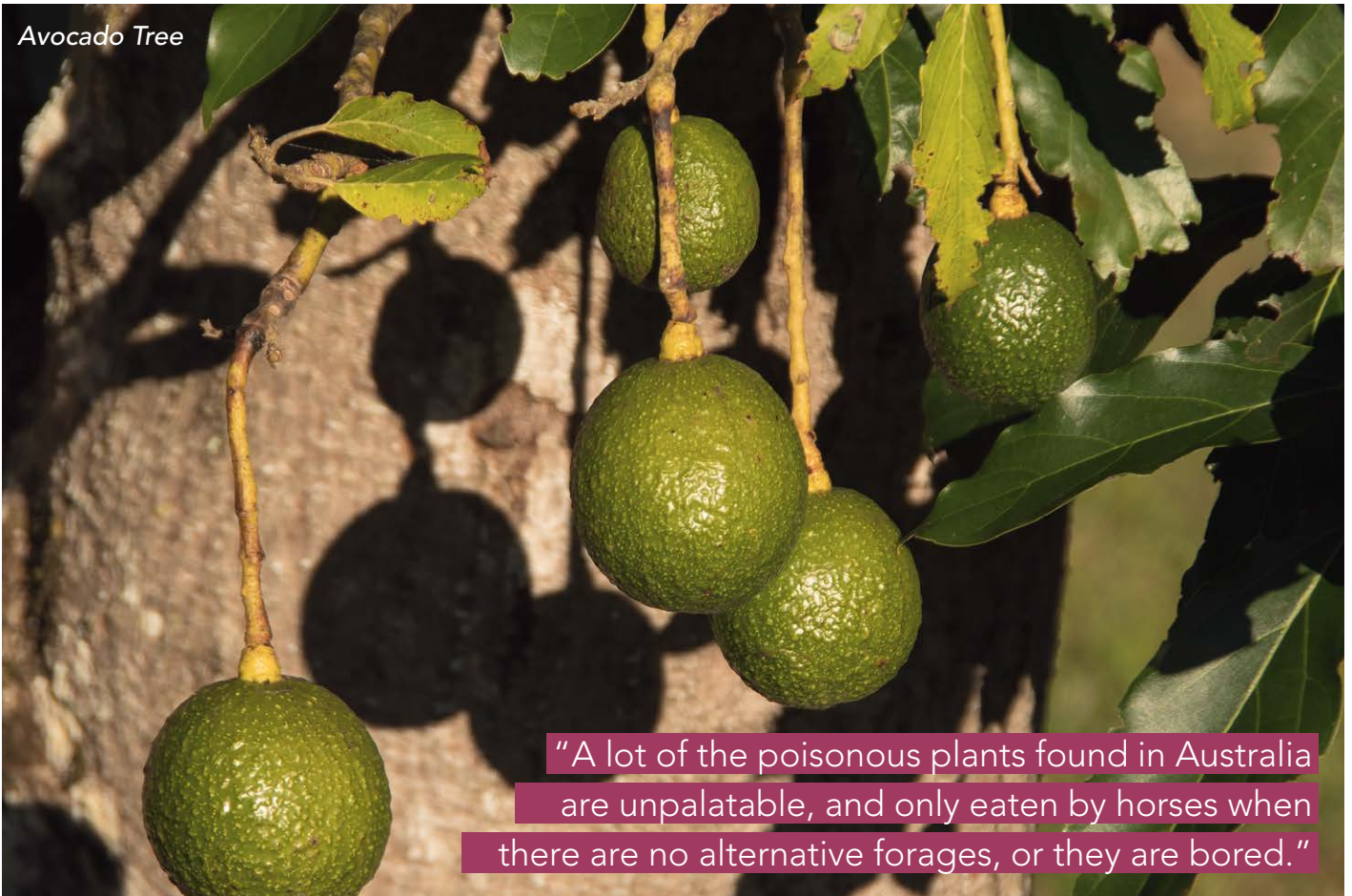
to the liver and include loss of body condition and appetite, dullness and constipation or diarrhoea.

Patersons Curse



Scan the QR code for more information on Paterson's Curse poisoning in horses.

Avocado Tree



“A lot of the poisonous plants found in Australia are unpalatable, and only eaten by horses when there are no alternative forages, or they are bored.”

Avocado tree - leaves/bark

Avocado trees are found throughout Australia and all parts of the tree are considered poisonous to horses, but the leaves contain the highest level of toxins, both when fresh and dried. It is uncommon for horses to ingest avocado trees, but it has been reported both in Australia and worldwide. Avocado trees are evergreen, but can be semi-deciduous in cooler climates, and can grow up to 15m in height. They have dark leathery leaves and produce small flowers that are yellow/green in colour. The time of year for flowering differs between varieties.

Symptoms of intoxication include: Mastitis and decreased milk production, swelling (usually the lips, mouth, head, neck and chest), diarrhoea, colic, lethargy and loss of appetite. In more severe cases you may see signs of heart issues, and shortness of breath which can lead to sudden death.

Oleander

Oleander is a very toxic plant, not only to horses but to all species (humans included!). For the average size horse, it can take as little as seven leaves to cause fatal toxicity. All parts of this plant are toxic, both fresh and dry. Whilst horses usually won't eat oleander due

to its bitter taste, when dried it is more palatable and just as toxic. Growing 2-5m in height, oleander is an upright evergreen with many stems that branch near ground level. It has elliptical or lance-shaped leaves that produce a white sap when damaged, and flowers

that are usually pink but can also be red, yellow or white. They usually flower in summer but can also flower in spring and autumn.

Symptoms of intoxication include: colic, breathing difficulty, diarrhoea, weakness, lethargy, agitation and muscle tremors.



Oleander

Scan the QR code for more information on Oleander poisoning in horses.



Nightshade

Nightshade

The term nightshade encompasses the large number of plants that are part of the Solanum genus, and there are over 100 species that can be found growing throughout Australia. They are used as garden ornamentals and a food source and have varying levels of toxicity depending on the species, growth stage and part of the plant in general. The leaves and green fruits are usually considered the most toxic. Reports of nightshade poisoning in horses are low due to its unpalatability, but the risk of consumption is higher when horses have no alternative forages.

Symptoms of intoxication include: nightshades produce a variety of toxins, which can affect the nervous system, and/or the gastrointestinal system, so the symptoms of ingestion are varied.

Toxins targeting the nervous system can cause depression and drowsiness leading to loss of consciousness in severe cases, as well as incoordination, convulsions and paralysis. Salivation and laboured breathing are also a symptom.

Toxins targeting the gastrointestinal system can cause colic, diarrhoea that may be bloody or constipation and intestinal ileus if high levels of toxin have been consumed.

Fireweed

Fireweed is a short-lived annual that grows 10-15cm tall and is considered a noxious weed in Queensland, NSW, the Australian Capital Territory and WA. It produces numerous seeds that are usually spread by wind. Its leaves are 2-12cm long and it usually flowers from late autumn to early summer, producing yellow flowers that cluster at the top of

the branches. Not only is fireweed toxic if ingested, but it can produce hives and irritation to the skin if your horse rolls in it. Most cases of fireweed intoxication occur due to low levels of ingestion over an extended period.

Symptoms of intoxication include: symptoms are varied and arise due to brain damage and liver failure. Some symptoms to watch out for are loss of condition, circling and aimless wandering.

Crofton weed

Crofton weed is highly toxic to horses and is a declared noxious weed in NSW and WA. This upright perennial usually grows 1-2m tall and can produce up to 100,000 seeds per year, which are spread by wind or water. It flowers from early summer through to autumn, dependent on the climate. The toxin that causes poisoning has not been identified, but it is thought to have a cumulative effect, leading to chronic lung disease.



Crofton Weed

An important note for this weed is that there is no known treatment, so recognition and early removal of the weed are crucial.

Symptoms of intoxication include: coughing and laboured breathing, depression and loss of condition and occasionally respiratory failure leading to death.

Preventing intoxication

Knowing what poisonous plants grow in your area is important so you can avoid planting them in paddocks or along fence lines where your horse can access them. As some plants are also toxic when dry, it is important to ensure they aren't in any hay you are feeding, and you aren't exposing your horses to any garden clippings that contain toxic plant material. Herbicides can be useful, but care should be taken as some poisonous plants can become more palatable once sprayed and increase the risk of ingestion.

A lot of the poisonous plants found in Australia are unpalatable, and only eaten by horses when there are no alternative forages, or they are bored. Making sure they have enough pasture and hay, plus a form of environmental stimulation can prevent them from eating plants that they normally wouldn't – horses boredom-eat too!

Another aspect to consider is your horse's age and general health. A horse that is healthy is better able to cope with exposure when compared to one that is unwell or considered geriatric. This is an area where annual health checks by your veterinarian can be a useful tool to have.

What to do if you suspect your horse has ingested a poisonous plant

The first step is to call the vet! If you are unsure about the identification of the plant they've eaten, take photos and send them to your veterinarian or look them up – a great online resource is Plants Poisonous to Horses – An Australian Field Guide by Mellisa Offord which has photos as well as in-depth descriptions of the plants to help you identify them. Preventing further ingestion is crucial, not only for the affected horse but other horses on the property. Utilising safe pastures or stables may be necessary while you remove the risk. 🐾