LIST OF POISONOUS PLANTS FOR CATS AND DOGS

There are over 700 plants that could kill or injure your dog or cat! Some could well be growing in your yard right now. The list included in this article cannot possibly begin to cover every single poisonous plant in existence, but some of these plants are much more toxic or more common than others. It is important to use your best judgment when determining whether or not these plants should remain in your home or garden. Consider your personal situation and the normal behaviour of your pets. If you keep any of these plants in areas that cannot be accessed by your pet, or if you have a pet that has never bothered with getting into your plants in the past, then it is likely you shouldn't have a problem with keeping those particular plants in a home with pets.

The most important thing for you do to when assessing your current plant situation is to dig a little bit deeper and find out exactly how toxic certain plants can be, what they look like and how they can affect your animals.

Common Poisonous Plants in South Africa:

The common approach to evaluating these plants is to follow a target organ or system approach i.e. nervous system, gastro-intestinal tract, liver, skin, heart and blood.

Let's begin by looking at plants that affect the <u>nervous system</u>:

<u>Melia azedarach</u>: this plant is also known as Syringa berry tree, China berry tree, Persian lilac or Seringboom. Intoxication normally occurs as a result of ingestion of the ripe berries which are more poisonous than the green berries. Dogs eat the drupes readily and are thus susceptible to poisoning. The clinical signs involve nervous signs such as restlessness and muscle trembling, but can also include respiratory distress, vomiting and diarrhoea.

<u>Cannabis sativa</u>: this is the "Dagga" or "Marijuana" plant. Pets may eat butts of marijuana cigarettes, left-over baked products and/or have their owner intentionally give it to them. The clinical signs include nervous signs such as a staggering gait, depression alternating with excitement, hallucinations, excessive barking and agitation for no apparent reason. Additional clinical signs may include vomiting, dry mucous membranes (mouth and eyes) and increased respiration rate (faster or simply seen as continuous panting).

<u>Macadamia nuts</u>: dogs have been known to eat the nuts or kernels which can be either raw or roasted. The estimated toxic dose for a 20 kg dog is considered to be in the region of 5 - 40 kernels. Adverse effects are often noticed within 6 - 24 hours and include hind limb weakness, depression and recumbency (lying down and unable to getup). Thankfully, most dogs recover spontaneously (without treatment) within 24 -48 hours.

<u>Amanita pantherina</u>: this is a type of mushroom that grows at the base of large trees e.g. deodar cedar trees. These are considered extremely poisonous and can cause life-threatening central nervous system damage. Once again, the initial signs can be unrelated, as in this case which are gastrointestinal (salivation, vomition and diarrhoea) followed by transient (thank goodness!) nervous signs like twitching, trembling and muscle spasms.

The following plants are known to primarily affect the gastrointestinal system:

<u>Ornithogalum spp.</u>: this plant is also known as Chinkerinchee, Star of Bethlehem or Tjienkerintjee. Incidentally, this is a plant that I have in my house currently but I am happy to report that none of my pets have plant eating or destroying habits. Dogs are often exposed to intoxication by digging out bulbs in garden or chewing on plants. Although this is a very pretty plant to have in your garden from an aesthetic standpoint, it is extremely toxic and causes severe diarrhoea and even blindness has been associated with this plant.

Ricinus communis: this plant is also known as the Castor-oil plant or Kasterolieboom. Intoxication is normally associated with ingestion of the seeds, which are extremely toxic (contains ricin – toxic ingredient) and causes severe diarrhoea and potentially multiple organ failure.

<u>Araceae family</u>: the poisonous plants included in this family are the *Alocasia and Colocasia spp.* (Elephants Ear or Olifantsoor), *Dieffenbachia spp.* (Dumb Cane), *Philodendron spp.* and *Monstera deliciosa* (Delicious monster) and *Zanthedeschia aethiopica* (Arum lilly or Varkoor). All of these plants contain calcium oxalate crystals (also referred to as 'raphides') in their leaves and when animals chew on them, these crystals are ejected out of their casings like splinters causing severe discomfort and pain, salivation, paralysis of the tongue as well as a numb feeling in the mouth and throat of the affected animal, which makes swallowing very difficult.

<u>Clivia miniata</u>: this refers to the common Clivia that a lot of people have in their homes. Young animals and destructive type dogs often chew and ingest plants in the garden, followed by salivation, vomiting and diarrhoea.

The following plants are known to primarily affect the liver:

<u>Encephalartos spp. and Cycas spp.</u>: an example of the latter plants is the Cycads or Broodbome. Dogs that have been reported to chew on cycad stems often lose their appetites, exhibit excessive salivation and depression often associated with some degree of liver damage.

<u>Cyanobacteria</u> (blue-green algae): there are multiple species of these algae that have been involved in small animal intoxications and include the <u>Microcystis aeruginosa</u>, <u>Nodularia spumigena</u>, <u>Oscillatoria spp.</u> and <u>Anabaena spp.</u> The most common from the list provided is the first one, <u>Microcystis aeruginosa</u>. Dogs are often exposed to it by drinking water contaminated with these algae or swimming through it. They subsequently groom themselves and ingest various amounts that can ultimately lead to severe liver damage.

<u>Amanita phalloides and Boletus edulis</u>: these are two types of mushroom that grow at the base of large trees e.g. evergreen oak trees. These are considered extremely poisonous and can cause life-threatening liver damage. Once again, the initial signs can be unrelated, as in this case which are gastrointestinal (salivation, vomition and diarrhoea) followed by irreversible liver and even kidney damage.

The following plants are known to primarily affect the skin:

<u>Euphorbia tirucalli</u>: the common names for this plant are Rubberhedge euphorbia or Kraalnaboom. When plant is damaged it releases a highly irritant sap or latex which is corrosive in eyes and on mucous membranes.

<u>Grass seeds and awns</u>: various species of grass have been implicated in having particularly barbed seeds or awns. The latter then lodge and penetrate the mucous membrane of the mouth, ear drum (tympanic membrane of the ear) and skin of the animal causing significant discomfort and pain, depending on the location and whether there is secondary infection. Examples of such grasses that are relatively common are *Themeda triandra* (Rooigras), *Heteropogon contortus* (Spear grass or Assegaaigras) and *Setaria verticillata* (Burr bristle grass or Klitssetaria).

The following plants are known to primarily affect the <u>heart</u>:

<u>Nerium oleander</u>: this is a very common tree that I often see all over South Africa. The common name is Oleander or Selonsroos, which comes in a number of varieties depending on the colour of the flowers. The toxicity of this plant is well documented as far back as the time of Alexander the Great where soldiers had their meat roasted on oleander skewers and would develop heart disease. The toxic principle or ingredient is referred to as a cardiac glycoside (cardenolide). The initial signs of intoxication involve the gastrointestinal tract (salivation, vomition and diarrhoea), but more importantly the signs of heart disease follow thereafter and include respiratory distress, cardiac rhythm disturbances and heart failure.

<u>Thevetia peruviana</u>: the common name for this plant is Yellow oleander or Geel oleander and is a very common resident of a lot of well-vegetated gardens or parks. The toxic ingredient is the same as that of *Nerium oleander*.

<u>Digitalis purpurea & D. lanata</u>: these are beautiful decorative plants which are often referred to as Foxgloves or Vingerhoedkruid. The toxic ingredient is the same as that of *Nerium oleander*.

<u>Persea americana</u>: most people recognise this name to represent avocados. There are three avocado races: Guatemalan (most poisonous), Mexican and West Indian races. Avocados are also identified in terms of their cultivars (often mentioned in packaging): the Hass, Fuerte and Nabal cultivars. Cage birds (Parrots, Budgerigars and Canaries) and ostriches seemed to be the most susceptible and develop general weakness, recumbency, inappetance and heart failure.

The following plants are known to primarily affect the blood:

<u>Allium cepa</u> and <u>Allium sativum</u>: these plants are recognized as our regular onions that we buy from our local grocery provider. Some owners intentionally feed it to repel insects and prevent flea infestations. Dogs and cats have been known to be fed pickled fish with onions, table scraps with lots of onions, onion soup or stew with onions. The toxic principle of onions causes oxidative damage to red blood cells causing subsequent anaemia and jaundice (icterus).

Conclusion

Many other types of emergencies can, and do, occur. If you have questions concerning symptoms your pet is exhibiting, seek advice from a veterinarian. Do not administer any prescription or over-the-counter medication without first discussing your pet's condition with a veterinarian.

Know your clinic's hours and if they provide after-hours emergency care. Determine before an emergency where you are supposed to go in the event one does occur. Post the phone numbers of where you are supposed to go so that you don't waste time looking for it, and enter them into your cell phone. Emergency and critical care centers (where after-hours and 24-hour care is provided), and specialists in veterinary emergency medicine are becoming more prevalent. Know the location and hours of operation of the closest facility. There may not be time for you to call first in some very critical emergencies, but in most cases a phone call to the emergency facility is a good idea.

If there are any questions concerning your pet's health, call your veterinarian or the emergency facility. As a general rule, if you are worried enough to call for advice, you should have your pet examined by a veterinarian as soon as possible.

Veterinary care in general, and emergency and critical care specifically, can place a high financial burden on families – make sure you openly discuss finances with your pet's caregivers and plan ahead for the unexpected. Pet health insurance is widely available and can help you make decisions on what is medically the best option, not just the most affordable one.

The purpose of this article is to provide pet owners with medical information to assist in their pets' care, and it is not intended to replace the advice of a veterinarian. Participating in your pet's care at home carries certain risks, both to your pet and to yourself.