



## POISONOUS PLANTS

### Plants most commonly recorded poisoning people (mainly children) in South Africa

*Datura stramonium* (Stinkblaar) – seed

The flowers are succeeded by large, egg shaped seed capsules of a green colour, about the size of a large walnut and covered with numerous sharp It exhales a rank, very heavy and somewhat nauseating narcotic odour. This foetid odour arises from the leaves, especially when they are bruised, but the flowers are sweet-scented, though producing stupor if their exhalations are breathed for any length of time.



The whole plant is poisonous, but the seeds are the most active; neither drying nor boiling destroys the poisonous properties. The usual consequences of the poison when taken in sufficient quantity are dimness of sight, dilation of the pupil, giddiness and delirium, sometimes amounting to mania, but its action varies greatly on different persons. Many fatal instances of its dangerous effects are recorded: it is thought to act more powerfully on the brain than Belladonna and to produce greater delirium.



*Ricinus communis* (Castor Oil Plant) – seed

The seeds from the castor bean plant, *Ricinus communis*, are poisonous to people, animals and insects. One of the main toxic proteins is "ricin",

It is advisable to keep children away from the castor bean plant or necklaces made with its seeds. The highly toxic seeds beaded into necklaces, cause skin irritation at the contact point. If the seed is swallowed without chewing, and there is no damage to the seed coat, it will most likely pass harmlessly through the digestive tract. However,



if it is chewed or broken and then swallowed, the ricin toxin will be absorbed by the intestines. It is said that just one seed can kill a child. Children are more sensitive than adults to fluid loss due to vomiting and diarrhea, and can quickly become severely dehydrated and die. Castor bean plants in a garden should not be allowed to flower and seed.



#### *Adenia digitata* (Wild Granadilla) – fruit

*Adenia digitata* is deadly poisonous. Children are often poisoned as a result of eating the attractive fruit.

*Adenia digitata* has the reputation of being the most poisonous plant in the world, and actually contains a cyanide compound.

Great care should be used when pruning or handling any of these plants.



#### *Aleurites fordii* (Tung Nut) – kernels

Tung trees are cultivated primarily for their seeds, but it is also used as an ornamental plant in the landscape. The oils obtained from the seed are used in the manufacture of lacquers, varnishes, paints, linoleum, oilcloth, resins, artificial leather, felt-base floor coverings, and greases, brake-linings and in clearing and polishing compounds.



All parts of the tung tree are poisonous even though it has been used to treat skin conditions and constipation.

The seeds are the most dangerous part of the plant. One seed can be fatal to a human.

Symptoms may include severe stomach pain, vomiting, diarrhea, weakness, slowed breathing, and poor reflexes. The leaves give some people a poison-ivy-like rash.



*Encephalartos* spp. (cycads) – kernels

Since most mature cycads produce large numbers of fairly sizeable seeds, it is not surprising that these too have been used as a food source. But many found out to their cost that the starch and protein-rich kernels of most cycads contain a dangerous poison with both acute and chronic toxicological properties.



*Jatropha curcas* (Physic or Purging Nut) – kernels

*Jatropha Curcas* oil contains a toxin, curcasin.

Another poison, a croton resin, occurs in the seeds and causes redness and pustular eruptions of the skin.

The plant is listed as a fish poison.



It is a drastic purgative and marked nausea, vomiting and diarrhoea is experienced after ingesting the seeds of *Jatropha*



*Melia azedarach* (Syringa) – fruit

The seeds are poisonous. The poison, which is found in the berries, is a triterpenoid or a limonoid which is made up of meliatoxins A1, A2, B1 and B2. Meliatoxins are not stable and this factor could be the reason why different trees have different levels of toxicity.

When the ripe berries are ingested the symptoms of poisoning are retching, breathing difficulty, the heartbeat is affected and a decline in the body temperature is noted.



The syringa tree is presently distributed throughout the moister, eastern parts of southern Africa, including the Kruger National Park, where it is a declared weed



*Colocasia esculenta* (Elephant's Ear) – leaves

*Alocasia macrorrhiza* (Elephant's Ear) – leaves

*Colocasia esculenta* (Elephant's Ear) – leaves

The plant is inedible when raw and considered toxic due to the presence of calcium oxalate crystals, typically as raphides. Leaves also must be handled with care due to toxicity of the leaves. Kalo has two types of calcium oxalate crystals, or idioblasts,...needle-like raphides and club-like druses. It is believed that the raphides cause the mucous membrane irritations and skin dermatitis.



*Nerium oleander* (Oleander) – leaves

Oleander poisoning occurs when someone sucks nectar from the flowers or chews leaves from the oleander or yellow oleander plant. Poisoning can also happen if you eat honey made by bees that used the oleander plant for nectar.



*Solanum* spp. – fruits

Its foliage and egg-shaped red berries are poisonous, the active principle being solanine, which can cause convulsions and death if taken in large doses.



*Dieffenbachia* spp. (Dumb Cane) – leaves

This plant is common in plant nurseries, many offices and homes. Ingestion produces the irritation and inflammation of gastric mucous and it can damage the kidneys, the arteries, or the stomach of those who eat it.

It can produce dermatitis with reddening, itchiness or burning. Its contact with the eyes produces irritation and transitory lost of vision.

When its juice is ingested, it can produce vomiting, diarrhea and inflammation of the digestive tract, especially in the mouth, the throat and the lips. A big ingestion of the plant can end up producing breathing difficulty.



Rhubarb (*Rheum rhabonticum*).

The leaf stalks (petioles) are edible, but the leaves themselves contain notable quantities of oxalic acid, which is a nephrotoxic and corrosive acid that is present in many plants.

Symptoms of poisoning include kidney disorders, convulsions and coma. Rarely fatal.



*Azalea (Rhododendron occidentale)*

Flowers and leaves of all rhododendrons and azaleas are poisonous. Luckily, like turpentine, andromedotoxin burns the mouth, which frequently discourages potential victims from consuming dangerous quantities of the leaves. Human fatalities from eating these plants are rare. However, victims who consume a lot suffer from nausea, vomiting, abdominal upset, and low blood pressure.



*Bird of Paradise (Strelitzia reginae)*

Ingestion of the 3-angled capsule and seeds causes vomiting, diarrhea, dizziness and drowsiness



*Hydrangea (Hydrangea macrophylla)*

Ingesting leaves and buds cause vomiting, diarrhea, gasping and rapid breathing.



*Lantana (Lantana spp.)*

Ingesting green berries causes stomach and intestinal irritation, muscular weakness, circulatory collapse and death. Acute symptoms resemble atropine poisoning.



### *Erythrina caffra*

The seeds of all erythrinas are said to be poisonous and the leaves are known to have poisoned cattle.

