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POISON PLANTS IN THE GARDEN

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An oleander growing in a street lawn. Its naturally low growth is easily accessible to children.



SOME 18 commonly grown garden plants are known to be toxic and many local home gardens have five or six of them. Several other species can cause skin ailments.

To be grown so commonly, these plants must have a useful purpose and it is not suggested that they should not be grown.

But it is important that their dangers are known and that children are warned. Stock-owners should be aware of the hazards of allowing stock to browse in gardens and of disposing of toxic garden clippings where stock may reach them.

Poison plants have been known to man since very early times. The ancient Greeks and Romans were acquainted with them, and so were the Hindus, as evidenced by Sanskrit texts written as early as 900 B.C.

Many of the primitive peoples of the world possess a knowledge of poison plants which they make use of in arrow poisons, fish poisons, hallucigenic drugs used in sacrificial and spiritual rites, love potions, abortifacients, and in a host of medicinal preparations. Many of these plants when taken in excess may cause poisoning and death.

Through the ages, poison plants, for one reason or another have been cultivated as garden subjects the world over. These plants present a great hazard to very young children, who have not learnt of the dangers of chewing at plants. Cases of plant poisoning in our modern society are most prevalent among children. Children have to be protected by keen

vigilance to see that they do not chew at plants. They must be told of the dangers of garden plants.

Certain plants, by virtue of their contained latex (milky sap), gum, resin, or sap, act corrosively, or as an irritant, or by the setting up of an allergic reaction in the skin. They may cause blistering, dermatitis, rash and even temporary blindness on contact with the cornea. People susceptible to skin ailments are strongly advised to wear gloves and to cover themselves when handling plants. The danger of touching the eyes after handling plants must always be borne in mind.

Plants that are poisonous when eaten may affect the patient in a variety of ways, depending upon the species of plant eaten and upon the toxic principle or principles contained in the plant. Some plants affect the heart, others the alimentary system, the nervous system or the respiratory system. When seeking medical treatment, the person affected would be advised to take a specimen of the offending plant to the attending medical practitioner. Knowing the cause could be useful in deciding treatment to be given.

If and when an ingested plant causes sickness or distress, do not hesitate to seek medical treatment. The sooner the treatment, the less serious the result.



Lantana growing as a hedge

In this article no attempt has been made to include plants, the sawdust of which is known to produce dermatitis in sawmill workers. Nor have those plants whose pollen or spores are known to cause respiratory allergy been listed. Only the more important or better known plants found under cultivation in Western Australian gardens, are included.

Plants Capable of Causing Skin Ailments

Capsicum annuum, Chilli. The fruits can cause local skin irritation and burning of the eyes. When ingested it can cause, by its irritant action, enteritis with consequent diarrhoea.

Echium plantagineum, Paterson's Curse, Viper's bugloss. Originally introduced as a cultivated subject and now more common as a weed, this plant by abrasive action of its stiff hairs and possible allergic reaction, is capable of causing rash when handled by susceptible persons.

Euphorbia spp. Several *Euphorbia* species including *E. pulcherrima*, Poinsettia, *E. tirucalli*, Naked lady, *E. milii*, Crown-of-thorns, and *E. marginata*, Snow-on-the-Mountain, found as garden subjects are corrosive in action when handled. The latex is irritant, causing temporary blindness on contact with the eye, and blistering to tender portions of the skin. When eaten the plants induce vomiting

and purging, and delirium preceding death.

Hedera helix, Ivy. This plant has caused skin rash, blistering and inflammation when handled. The berries are said to be poisonous to children who have eaten them.

Narcissus pseudo-narcissus, Daffodil. The sap from the cut stems of this plant has caused dermatitis. The plant is poisonous when eaten, causing inflammation of the digestive tract and convulsions, sometimes with fatal results. The Jonquil, *N. jonquilla*, is also poisonous, as are some of the other members of the Amaryllidaceae, the family to which these plants belong. *Amaryllis belladonna*, *Crinum* spp., and *Nerine* spp. are examples.

Rhus spp. Species of *Rhus* are capable of causing skin irritation. The most severe form is caused by *R. toxicodendron*, Poison Ivy, with severe irritation and blistering of the skin, while an intense swelling of the face, which may spread to other parts of the body, is characteristic.

Schinus terebinthifolius, Japanese Pepper. A susceptible person who deliberately drew a branch of this plant across an arm, came up with severe dermatitis on the portion touched. The fruit of this plant and the related *S. molle*, Pepper tree, are toxic when ingested in quantity, producing irritation in the throat, vomiting and diarrhoea.

Castor-oil trees, like this volunteer specimen in a vacant block, grow low enough to be within easy reach of children and make attractive playing places



Plants Poisonous When Eaten

Acokanthera spectabilis, Winter Sweet. The whole plant is highly poisonous, and the eating of the fruit by children has resulted in deaths. The symptoms of poisoning by this plant are severe, gastrointestinal irritation with digitalis-like cardiac effects.

Caesalpinia gilliesii, Bird of Paradise. The pods and seeds are said to be poisonous to children. The symptoms of poisoning are vomiting and diarrhoea.

Conium maculatum, Hemlock. Poisonings by this plant have been recorded in humans, more especially in children who may mistake the leaves of hemlock for parsley, or may chew the seeds or make whistles or pea-shooters from the stem. Hemlock is a narcotic plant, the symptoms of poisoning being a general and gradual weakening of muscular power. Loss of sight may occur, and death results from gradual paralysis.

Cotoneaster spp., Cotoneaster. The fruit of these plants yield hydrocyanic acid, particularly after heavy frost. Children who have eaten the fruit in this condition have become violently sick.

Datura arborea, Angel's trumpet. The fruit and seeds of this plant are poisonous, and have been the cause of human fatalities. The contained toxic principles are alkaloids. The symptoms of poisoning are

dryness of throat and increasing thirst in the early stage, disturbance of vision, followed quickly by giddiness, flushing of the face, and sometimes headache, restlessness, and a kind of inebriation on attempting to walk. The restlessness increases and the patient ultimately becomes wildly delirious and incoherent. The pupils of the eyes are widely dilated, the heart rate quickened. The violent delirium changes dramatically to a low muttering type of exhaustion, which ushers in coma and finally death.

Dieffenbachia seguine, Dumb-Cane. This plant was formerly used for torturing slaves in the West Indies. Persons chewing on the stem are rendered speechless. The plant contains needles of oxalates and an unknown toxin which produces a tingling pain to the lips and mouth, and causes vomiting if swallowed.

Duranta repens, Duranta. The fruits are said to cause illness and death in children, with symptoms of sleepiness, high temperature, rapid pulse and convulsions.

Ipomoea spp., Morning Glory. The fruit and especially the seeds of these plants can contain hallucigenic compounds, poisonous to humans. The contained lysergic acid derivatives have been used in modern medicine.

Laburnum vulgare, Laburnum. The leaves and seeds of this plant are poisonous. The seeds, which are the most



Two toxic species dominate this front garden. In the foreground is the corner of an 80-ft. privet hedge and the background growth is a line of oleander trees alongside the side fence

toxic part, have been eaten by children who have been poisoned by doing so. The alkaloid cytisine is said to be the toxic principle. The symptoms of poisoning are vomiting, purging, tetanic spasms and convulsions.

Lantana camara, Lantana. The fruit is said to be poisonous, and children have frequently been made ill through eating them.

Ligustrum vulgare, Privet. The berries have been recorded as being lethal to children. The signs and symptoms of poisoning are vomiting, diarrhoea, weak pulse, subnormal temperature and coldness of body, muscular twitchings and convulsions.

Melia azedarach, Cape lilac, White cedar. The fruits of this plant are poisonous and have caused death of children eating them. The symptoms include nausea, vomiting, diarrhoea, laboured breathing and palpitation.

Nerium oleander, Oleander. Almost since the dawn of medical history this plant has been known to be poisonous. All parts of the plant are poisonous, and provide a source of danger to young children. Children have been fatally poisoned through eating one flower. Poisoning has

followed the eating of meat cooked on skewers made from the wood, and from the eating of porridge stirred with oleander twigs. Inhaling smoke from burning oleander stems can produce symptoms of poisoning. Two toxic glucosides have been isolated from the plant. These are said to have a digitalis-like action, the chief effect being to slow the heart. The symptoms of poisoning in humans are nausea, vomiting, colic, dizziness, staggering gait, dilation of the pupil, sanguineous diarrhoea, cardiac weakness and death preceded by coma.

Prunus spp. The kernels of apricot and plum may contain sufficient hydrocyanic acid to cause poisoning of humans, and have caused the death of at least one child. The symptoms of poisoning are vertigo, mental dimness, headache and palpitation, followed by dyspnoea (often marked) and finally unconsciousness with convulsions. Ultimately the respiration stops after a period of difficulty.

Ricinus communis, Castor-oil plant. The seeds of this plant are poisonous, causing purging with nausea and vomiting. Two to three seeds can constitute a fatal dose to an adult human. Sometimes a choleraic condition is produced, the signs and symptoms of which are restlessness, pinched features, cold clammy skin,

marked thirst, small rapid pulse and cramps in the muscles of the calf and abdominal wall. The stools are not of the cholera type. The sufferer may become drowsy and even stuporose, but in many cases consciousness is retained, although the patient may be in a state of collapse.

Robinia pseudo-acacia, False Acacia. The bark, leaves and flowers are said to be toxic. Children have been poisoned from chewing the bark which is said to be sweet like licorice. The symptoms of poisoning are repeated vomiting, sleepiness, dilation of the pupil and convulsions.

Sambucus spp., Elder. There are records of this plant being poisonous when eaten by humans, with severe purging, sometimes followed by paralysis and death.

Solanum spp. The fruits of several cultivated species of *Solanum* have been reported as poisonous, and have caused illness in children.

Thevetia peruviana, Yellow Oleander. The eating of the fruit of this plant by children has resulted in death. All parts of the plant are very poisonous, especially the kernel of the fruit. Symptoms of poisoning are similar to Oleander.

Zantedeschia aethiopica, Arum Lily. All parts of the plant contain sharp crystals of oxalate and an unknown toxin. When eaten the plant causes dermatitis, swelling of the tongue and throat and severe illness. Children who are poisoned by this plant are attracted by and usually eat the white spathe or the yellow spadix.