


Healing or Harmful?

Poisonous plants are the type that no one wants in the garden. Although some plants have healing properties, others have substances that, when they enter the body, provoke noxious reactions that cause injury or even death. The most infamous of these plants is hemlock, which can also be used medicinally. The primary active components of poisonous plants are alkaloids. One of the most potent poisons from plants is ricin: 0.35 ounce (1 mg) is enough to kill a person. •

A Matter of Quantity

 Poison is a substance that produces illness or tissue lesions or that interrupts natural vital processes when it comes into contact with the human organism. Dosage is a key factor for a substance to act as a poison. The same substances that can produce death in an organism can, in smaller concentrations, act as a medicine and provide relief from certain types of suffering.

Hemlock Water Dropwort
Oenanthe crocata
A plant belonging to the Umbelliferae family that is considered toxic because of its narcotic effects. However, it can also be medically prescribed to treat disorders such as epilepsy.

Poison Hemlock

Also known as *Conium maculatum*, this herbaceous plant belongs to the Umbelliferae family. It has a hollow, striated stem, with purple spots at its base. Though poisonous, it has been used to calm strong pains and headaches. Poison hemlock has a characteristic offensive, urinelike odor. The active component in hemlock is conium, an alkaloid that has neurotoxic effects.

Poison Hemlock
Conium maculatum

HEIGHT
It can grow to a height of 6.5 feet (2 m).



SOCRATES
This philosopher died by drinking hemlock, a sentence imposed by the Greek court.



1.

BURNING

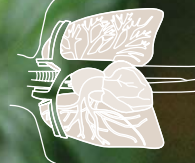
Intoxication produces a dry mouth, dilated pupils (mydriasis), and nausea.



2.

PARALYSIS

The legs weaken, the muscles become paralyzed, and respiratory failure and asphyxia take place.



3.

DEATH

The subject remains conscious until the moment of death.


10%

OF VEGETABLE SPECIES
have alkaloids; compounds formed with nitrogen.

Belladonna (Deadly Nightshade)

has three alkaloids that are considered poisonous: hyoscyamine, scopolamine, and atropine. These substances affect the autonomous nervous system, which regulates breathing and cardiac rhythm. In medicine atropine in low dosages decreases the intensity of intestinal contractions.

Other Poisonous Plants

 Several cultivated and wild plants have active ingredients that have various levels of toxicity for people and animals. The castor bean (*Ricinus communis*) contains ricin, and chewing two of its seeds can be fatal for a child. *Digitalis* contains substances that can cause a heart attack. Other common poisonous plants, such as oleanders, provoke diarrhea, nausea, and other symptoms if their flowers or fruits are eaten.

Poison Ivy

is a low vine that grows along the ground and often climbs walls, tree trunks, and bushes. It has bright green leaves that have an oily toxin, which causes light to severe allergic reactions. The symptoms can appear between one and three days after having touched the plant.

Poison Ivy
Toxicodendron radicans

IDENTIFICATION
In winter the plant has no leaves but greenish white berries. In the summer the berries are green; they are red in the spring and can be yellow in early autumn.

HEIGHT
It can grow to a height of 10 feet (3 m).



Belladonna
Atropa belladonna

WAR FLOWER

It is said that belladonna was used to poison Mark Antony's troops during the Parthian wars.

HEIGHT
It grows to a height of 5 feet (1.5 m).

