



# Potentially harmful garden plants

**SUMMARY** Most of the plants grown in gardens do not present any hazard to humans or animals, and incidents of serious plant poisoning in the United Kingdom are rare. Nevertheless it is a responsibility of gardeners to see that no avoidable risks are presented, and knowledge of potentially harmful plants should be gained. It is an equal responsibility of garden users to be alert for their own safety and especially that of children and animals. The Horticultural Trades Association has worked with the Royal Horticultural Society and other organisations to compile a list of potentially harmful plants and develop a Code of Recommended Retail Practice for the labelling of plants at garden centres and nurseries. Look for safety information on labels when purchasing plants and learn what to do in the unlikely event of poisoning through eating or handling plants.



Most garden plants are quite harmless

Photo: Steven Wooster

## RHS policy statements

- 1 The RHS will continue to work with other national bodies to ensure that appropriate and up-to-date information is made available to gardeners on potentially harmful plants, making its own guidance widely available through leaflets, the RHS website and other advisory services.
- 2 The RHS recommends restricting access to the potentially most harmful plants by care in choice of plants and planting positions in gardens.
- 3 The RHS encourages garden centres and nurseries to follow the Horticultural Trades Association Code of Practice on the labelling of potentially harmful plants and does so at its own plant centres and in its seed lists.

# Potentially harmful garden plants

## Risks and responsibilities

In recent years there has been an increase in media attention to the subject of potentially harmful garden plants. Fortunately, incidents of serious poisoning by plants are rare in the United Kingdom, and deaths very infrequent. These mostly involve adults who have either mistaken a poisonous plant for an edible one or misjudged the dose of a “herbal remedy”. The toxic constituents of some poisonous plants are invaluable medicinal drugs when administered at a low dosage under proper supervision. However, they can be fatal if misused and it is important that possible risks are understood. It is also important that the subject is seen in proper perspective, to avoid unnecessary alarm and spoiling the enjoyment of gardens and gardening.

It is reasonable to expect individuals always to exercise proper responsibility for their own safety and that of children and pets in their charge within the house and garden environment. At the same time gardeners should take care to prevent exposure to high risk.

Photo: Harry Smith Collection



Arum lily (*Zantedeschia aethiopica*)

## Where's the harm?

Many plants, or parts of them such as fruits and seeds, are safe and good to eat and are recognized as food plants. Most others found in the garden as ornamental plants or weeds are not dangerous. Some may cause a digestive upset and discomfort if eaten, as will unripe fruit or raw rhubarb stalks, whilst a very few garden plants are more hazardous and could cause severe poisoning. Many of the plants to be avoided are already well known to be potentially hazardous. Some have an unpleasant taste which reduces the likelihood of a dangerous quantity being eaten, whilst others just do not look edible.

Nibbling plants is mainly a hazard of childhood, so small children may be vulnerable until they can be taught not to eat any part of a growing plant. A sensible rule is: If it isn't recognized food, don't eat it. Make sure children know this.

As well as the danger of poisoning through eating plants, there is also the possibility of suffering an irritant or allergic reaction through contact with a plant or its sap. Gardeners are perhaps more at risk of these effects, for example while weeding or pruning. There are three main types of contact hazard:

- i) Irritant sap may cause a burning sensation and sometimes blistering of the skin; anyone can be affected if the exposure is sufficient.
- ii) Some plants contain chemicals called allergens. These do not affect everyone, but some individuals may acquire a sensitivity to them resulting in an allergic reaction. This is often a form of dermatitis but may in rare

cases be more far-reaching, as with nut allergies.

- iii) A very small number of plants have sap which renders the skin excessively sensitive to strong sunlight. Contact with a plant followed by exposure to sunlight results in very severe localized sunburn with blistering and a long-lasting skin discolouration.

Farm animals are more likely to be exposed to the danger of poisoning than domestic animals, but puppies are notoriously adventurous. Never leave hedge clippings or uprooted plants in reach of pets or farm animals; in many cases the withered condition adds to the risk of poisoning. Most animals seem to be aware of and avoid growing plants that could harm them but parts of plants, or dead and shrivelled specimens, are often not recognised.

## Purchase plants wisely

The Horticultural Trades Association has issued a Code of Recommended Retail Practice relating to the labelling of potentially harmful plants. This is based on research carried out by a project group consisting of representatives of the Medical Toxicology Unit, Guy's and St Thomas' Hospital Trust, the Royal Botanic Gardens Kew and the Royal Horticultural Society. It is a voluntary Code produced to address public concern and sets out guidelines for keeping customers informed of potentially harmful plants at the point of purchase. This is part of the broader responsibility, shared by all concerned with the sale and display of plants, to provide good advice on the subject.

## What to do when poisoning is suspected

If you think a child or adult has eaten part of a doubtful plant seek medical advice at once from a hospital Accident and Emergency Department.

If you think an animal has eaten a poisonous plant seek veterinary advice at once. In all cases take along samples of the plant concerned. Don't panic, and do not attempt to make the subject vomit. In cases of irritant or allergic dermatitis severe enough to require medical attention, again provide a sample of the plant or plants suspected to be the cause.

## Some useful references

COOPER, M.R. & JOHNSON, A.W. (1998) *Poisonous Plants and Fungi in Britain: Animal and Human Poisoning*. London, The Stationery Office

COOPER, M.R., JOHNSON, A.W. & DAUNCEY, E.A. (2003) *Poisonous Plants and Fungi: an Illustrated Guide*. London, The Stationery Office

FROHNE, D. & PFÄNDER, H.J. (1984) *A Colour Atlas of Poisonous Plants: a handbook for pharmacists, doctors, toxicologists and biologists*. London, Wolfe Scientific Ltd

ROYAL BOTANIC GARDENS, KEW & MEDICAL TOXICOLOGY UNIT, GUYS & ST THOMAS' HOSPITAL TRUST (2000) *Poisonous Plants and Fungi in Britain and Ireland*. An identification system on CD-ROM

Other leaflets in the RHS Guidelines series can be read and downloaded from [www.rhs.org.uk/publications](http://www.rhs.org.uk/publications). They can be obtained by post by sending an A4 SAE to A W Mailing Services Ltd, PO Box 38, Ashford, Kent TN25 6PR (91p postage for the full set).

## Plants to recognize

Here is a list of plants which are often found in gardens, or available for sale. It describes three types of potential risk.

External effects as

i) **Skin irritants**

ii) **Eye irritants**

Internal effects as

iii) **Poisons**

The poisons category includes plants known to present any level of hazard. When eaten, some may cause mild illness, while a very few may cause severe poisoning. The correct approach is to avoid eating any plants listed as poisonous.

*Acalypha* (chenille plant, copperleaf):

**skin & eye irritant; poisonous**

*Aconitum* (monkshood): **poisonous;**

**irritant to and via the skin**

*Actaea* section *Actaea* (baneberry):

**poisonous; skin irritant**

*Aesculus* (horse chestnut): **poisonous**

*Aglaonema* (Chinese evergreen):

**poisonous; skin & eye irritant**

*Agrostemma githago* (corncockle):

**poisonous**

alder buckthorn: See *Rhamnus*

*Allamanda*: **poisonous; skin & eye**

**irritant**

*Alocasia* (taro): **poisonous; skin &**

**eye irritant**

*Aloe*: **poisonous**

*Alstroemeria* (Peruvian lily): **skin**

**irritant**

amaryllis: See *Hippeastrum*

*Amaryllis belladonna* (belladonna

lily): **poisonous**

angel's trumpet: See *Brugmansia*

*Anthurium* (flamingo flower):

**poisonous; skin & eye irritant**

*Arisaema* (cobra-lily): **poisonous;**

**skin & eye irritant**



Yew (*Taxus baccata*)

*Arum* (cuckoo-pint, lords-and-ladies):  
poisonous; skin & eye irritant

*Asparagus* (asparagus fern): may  
cause skin allergy; fruits  
poisonous

*Atropa* (deadly nightshade):  
poisonous; skin irritant

bluebell: See *Hyacinthoides*

*Brugmansia* (angel's trumpet):  
poisonous

*Brunfelsia* (yesterday, today and  
tomorrow): poisonous

buckthorn: See *Rhamnus*

bunny ears cactus: See *Opuntia*

burning bush: See *Dictamnus*

*Caladium* (angel's wings): poisonous

calla lily: See *Zantedeschia*

*Calla palustris* (water arum):  
poisonous; skin & eye irritant

*Capsicum annum* (ornamental  
pepper): skin & eye irritant;  
poisonous

castor oil plant: See *Ricinus*

*Chelidonium majus* (greater  
celandine): poisonous; skin & eye  
irritant

chenille plant: See *Acalypha*

cherry laurel: See *Prunus laurocerasus*

chinchinchee: See *Ornithogalum*

Chinese evergreen: See *Aglaonema*

Christmas cherry: See *Solanum*

*Chrysanthemum*: skin irritant

*Colchicum* (autumn crocus):  
poisonous

comfrey, Russian comfrey: See  
*Symphytum*

*Convallaria majalis* (lily-of-the-  
valley): poisonous

*Coriaria*: poisonous

corncockle: See *Agrostemma*

× *Cupressocyparis leylandii* (Leyland  
cypress): skin irritant

daffodil: See *Narcissus*

*Daphne* (mezereon, spurge laurel):  
poisonous; skin irritant

*Datura* (thornapple): poisonous;  
skin irritant

*Delphinium* (including *Consolida*)  
(larkspur): poisonous

*Dictamnus* (burning bush): skin  
irritant

*Dieffenbachia* (dumb cane, leopard  
lily): poisonous; skin & eye  
irritant

*Digitalis* (foxglove): poisonous

*Dracunculus* (dragon arum):  
poisonous; skin & eye irritant

dumb cane: See *Dieffenbachia*

*Echium*: skin irritant

*Epipremnum* (devil's ivy): poisonous;  
skin & eye irritant

*Euonymus* (spindle tree): poisonous

*Euphorbia* (spurge): poisonous; skin  
& eye irritant

NB: poinsettia, *E. pulcherrima*, is  
not harmful

*Ficus benjamina* (weeping fig): may  
cause skin allergy

*Ficus carica* (fig): skin & eye irritant

foxglove: See *Digitalis*

*Fremontodendron*: skin & eye  
irritant

*Gaultheria* section *Pernettya*:  
poisonous

giant hogweed: See *Heracleum*

*Gloriosa superba* (glory lily):  
poisonous

glory lily: See *Gloriosa*

*Hedera* (ivy): poisonous; skin  
irritant

*Helleborus* (Christmas rose, Lenten  
rose): poisonous; skin irritant

henbane: See *Hyoscyamus*

*Heracleum mantegazzianum* (giant  
hogweed): severe skin irritant in  
bright sunlight

*Hippeastrum* (amaryllis): poisonous

*Homeria*: poisonous

*Hyacinthoides* (bluebell): poisonous

*Hyacinthus* (hyacinth): skin irritant

*Hyoscyamus* (henbane): poisonous

*Hypericum perforatum* (perforate St  
John's wort): poisonous

*Ipomoea* (morning glory): poisonous

*Iris*: poisonous; skin irritant

ivy: See *Hedera*

*Kalmia* (calico bush): poisonous

+ *Laburnocytisus 'Adamii'*:  
poisonous

*Laburnum*: poisonous

*Lagenaria* (bottle gourd): poisonous

*Lantana*: poisonous; skin irritant

larkspur: See *Delphinium*

laurel: See *Prunus laurocerasus*

*Ligustrum* (privet): poisonous

lily-of-the-valley: See *Convallaria  
majalis*

*Lobelia* (except bedding lobelia, *L.  
erinus*): poisonous; skin & eye  
irritant

*Lupinus* (lupin): poisonous

*Lysichiton* (skunk cabbage):  
poisonous; skin & eye irritant

*Mandragora* (mandrake): poisonous

*Mirabilis* (marvel of Peru, four  
o'clock plant): poisonous; skin  
irritant

monkshood: See *Aconitum*

*Monstera deliciosa* (Swiss cheese  
plant): poisonous; skin & eye  
irritant

morning glory: See *Ipomoea*

*Narcissus* (daffodil): poisonous; skin  
irritant

*Nerium oleander* (oleander):  
poisonous

*Nicotiana* (tobacco): poisonous

oleander: See *Nerium oleander*

*Opuntia microdasys* (bunny ears  
cactus): skin irritant

*Ornithogalum* (chinchinchee, star-  
of-Bethlehem): poisonous; skin  
irritant

*Papaver somniferum* (opium poppy):  
poisonous

*Passiflora caerulea* (hardy passion  
flower): poisonous

peace lily: See *Spathiphyllum*

*Pernettya*: see *Gaultheria*

*Philodendron*: poisonous; skin & eye  
irritant

*Phytolacca* (pokeweed): poisonous;  
skin irritant

*Podophyllum* (May apple): poisonous

poinsettia: See *Euphorbia*

pokeweed: See *Phytolacca*

*Polygonatum* (Solomon's seal):  
poisonous

*Polyscias*: poisonous; skin irritant

*Primula obconica* (German primula):  
skin irritant

privet: See *Ligustrum*

*Prunus laurocerasus* (cherry laurel,  
laurel): poisonous

*Prunus lusitanica* (Portugal laurel):  
seed kernels are poisonous

*Rhamnus* (including *Frangula*)  
(alder buckthorn, buckthorn):  
poisonous; skin irritant

*Rhus verniciflua*, *R. radicans*,  
*R. succedanea*, *R. diversiloba*,  
*R. rydbergii*, *R. striata*,  
*R. toxicarium*. *R. vernix* (Japanese  
lacquer tree, poison ivy, sumach):  
poisonous; severe skin irritant

*Ricinus communis* (castor oil plant):  
poisonous

*Robinia pseudoacacia* (locust tree):  
poisonous

*Ruta* (rue): severe skin irritant in  
bright sunlight

St John's wort: See *Hypericum*

*Sambucus* (except *S. nigra*) (elder):  
poisonous

*Schefflera* (umbrella tree): skin  
irritant

*Scilla*: poisonous

snowberry: See *Symphoricarpos*

*Solanum* (most species): poisonous

Solomon's seal: See *Polygonatum*

Spanish broom: See *Spartium*

*Spartium junceum* (Spanish broom):  
poisonous

*Spathiphyllum* (peace lily):  
poisonous; skin & eye irritant

spindle tree: See *Euonymus*

spurge: See *Euphorbia*

sumach: See *Rhus*

Swiss cheese plant: See *Monstera*

*Symphoricarpos* (snowberry):  
poisonous

*Symphytum* (comfrey, Russian  
comfrey): poisonous

*Syngonium* (arrowhead vine,  
goosefoot vine): poisonous; skin &  
eye irritant

*Tabernaemontana* (crepe jasmine):  
poisonous

*Taxus* (yew): poisonous

thornapple: See *Datura*

*Tulipa* (tulip): skin irritant

*Veratrum* (false hellebore): poisonous

*Vitex* (chaste tree): skin irritant

*Wisteria*: poisonous

yesterday, today and tomorrow: See  
*Brunfelsia*

yew: See *Taxus*

*Zantedeschia* (calla lily): poisonous;  
skin & eye irritant

All of these plants are safe to grow  
provided they are treated with  
respect. Remember they are  
ornamental plants, not food plants.



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