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.

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.
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.

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


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 belladona (belladonna lily): poisonous

Angel’s trumpet: See Brugmansia

Anthurium (flamingo flower): poisonous; skin & eye irritant

Arisaema (cobra-lily): poisonous; skin & eye irritant

Other leaflets in the RHS Guidelines series can be read and downloaded from 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).
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

Frémontodendron: 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

Kalmoskia (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

Lupin (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 (chinncherinchee, star-of-Bethlehem): poisonous; skin irritant

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*): poisonous; 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.