

POISONOUS PLANTS IN SCHOOL GROUNDS

Recently there has been an increase in the awareness that some plants and fungi, both cultivated and wild, may contain poisonous properties. It would be easy to overreact towards all plants, stressing the hazards to children in a way that would produce a generation of people who would fear and distrust all plant life. It would be similarly unacceptable to totally ignore the situation, and this information sheet is designed to advise teachers of the risks that children may encounter in their school grounds.

The majority of plants are harmless, and far greater risks are posed to humans by other everyday substances and practices. The list of plants given below will allow you and your pupils to enjoy confidently the plant life in your school grounds.

On the very few occasions when children have been affected by poisonous plants it has been either the attraction of brightly coloured juicy berries, or curiosity which has led to the problem. For this reason children should be taught not to eat any fruits, seeds, berries or any part of any plant or fungi, unless they have been given permission by a responsible adult.

Children should also be taught that the few plants that pose a possible hazard contain poisonous substances, as a defence mechanism against insect and micro organism attack and that they are probably only incidentally poisonous to mammals and man. Actually, poisoning incidents in this country are extremely rare - between 1962 and 1978 only 2 people died from plant poisoning in the whole of Great Britain and Ireland.

The amount of toxic substance in any plant varies from locality to locality, from season to season, and its effect depends upon the health and condition of the person concerned. The effect of a poisonous plant can be diarrhoea, abdominal pains and vomiting if eaten, or a skin or eye reaction from contact, that increases when exposed to sunlight.

Emergency First Aid

If you suspect that someone is suffering from eating a poisonous plant:

- 1 Do not try to make the person sick.
- 2 Take the person immediately to a doctor or hospital accident emergency department with a sample of the plant or fungi for identification purposes.
- 3 Note the time of eating and any symptoms. These may appear many hours later.

If you suspect skin or eye irritation by a plant:

- 1 Wash the affected area with clean water.
- 2 If in doubt, seek medical advice as above. Remember to take a sample of the plant with you.

In both cases do not forget to report the incident later on the appropriate County form.

The following three lists have been prepared by the Royal Society for the Prevention of Accidents and highlights 37 plants which teachers should be aware of as posing a possible hazard.

1

Indoor Plants			
Angels' Trumpets	(Brugmansia)	=	H
German Primula	(Primula Obconica)	=	C
Lantana	(Lantana)	=	HC
Leopard Lily	(Dieffenbachia)	=	HC
Mistletoe	(Viscum Album)	=	H
Oleander	(Nerium Oleander)	=	H
Rosy Periwinkle	(Catharanthus Roseus)	=	H
Umbrella Tree	(Schefflera)	=	C
Bulbs eg Daffodils & Hyacinths	(Narcissus) (Hyacinthus)	=	HC
Cut flowers eg Daffodils & Monkshood	(Narcissus) (Aconitum)	=	HC
Seeds eg Castor Oil Plant	(Ricinus Communis)	=	H

2

Garden Plants			
Autumn Crocus	(Colchicum Autumnale)	=	H
Spurges	(Euphorbia)	=	HC
Foxglove	(Digitalis Purpurea)	=	H
Freemontodendron	(Freemontodendron)	=	C
Ivy	(Hedera Helix)	=	HC
Laburnum	(Laburnum Anagyroides)	=	H
Leyland Cypress	(X Cupressocyparis)	=	C
Lily-of-the-Valley	(Convallaria Majalis)	=	H
Lupins	(Lupinus)	=	H
Mezereon	(Daphne Mezereum)	=	HC
Monkshood	(Aconitum Napellus)	=	HC
Pokeweed	(Phytolacca)	=	HC
Rue	(Ruta Graveolens)	=	C
Yew	(Taxus Baccata)	=	H

3

Wild and Native Plants			
Black Bryony	(Tamus Communis)	=	H
Black Nightshade	(Solamum Nigrum)	=	H
Cherry Laurel	(Prunus Laurocerasus)	=	H
Deadly Nightshade	(Atropa Belladonna)	=	H
Giant Hogweed	(Heracleum Mantegazzianum)	=	C
Hemlock	(Conium Maculatum)	=	H
Hemlock Water Dropwort	(Oenanthe Crocata)	=	H
Horse Chestnut	(Aesculus Hippocastanum)	=	H
Lords-and-Ladies	(Arum Maculatum)	=	H
Snowberry	(Symphoricarpos Albus)	=	H
Wild Privet	(Ligustrum Vulgare)	=	H
Woody Nightshade	(Solanum Dulcamara)	=	H

H - harmful if eaten; **C** - harmful if handled; **HC** - harmful if eaten or handled

This list is not exhaustive, therefore **DO NOT** assume that plants not listed are safe.

There are a number of fungi which grow in this country that are poisonous, the most significant of which are listed overleaf. Children should be taught never to eat or touch any fungal growth they find at any time. A number of poisonings have occurred in recent years by people drying and eating fungi in order to hallucinate.

Clitocybe	(Clitocybe Species)
Common Ink Cap	(Coprinus Atramentarius)
Death Cap	(Amanita Phalloides)
Destroying Angel	(Amanita Phalloides)
Devil's Boletus	(Boletus Satanas)
Dung Roundhead	(Stropharia Semiglobata)
Ergot	(Claviceps Purpurea)
Fairy Cake Hebeloma	(Hebeloma Crustuliniforme)
False Morel	(Gyromitra Esculenta)
Fly Agaric	(Amanita Muscaria)
Grey Mottle Gill	(Panaeolus Sphinctrinus)
Inocybe	(Inocybe Species)
Liberty Cap	(Psilocybe Semilanceata)
Livid Entoloma	(Entoloma Lividum)
Magic Mushrooms	(Gymnopilus, Panaeolus, Psilocybe Species)
Mower's Mushrooms	(Panaeolus Foeniseccii)
Panther Cap	(Amanita Pantherina)
Sickener	(Russula Emetica)
Sulphur Tuft	(Hypholoma Fasciculae)
Yellow-Staining Mushroom	(Arzarius Xanthodermus)

There are several other rarer fungi which do not contain poisonous substances but which are fully listed in 'Poisonous Plants and Fungi - An Illustrated Guide'.

Plants in the Curriculum

Safety in Science Education (DfEE 1996) provides further useful information on plants and their use in the Science curriculum, which may be pertinent to other subject areas. Tables 17.5 to 17.9 give advice on plant poisoning, allergies, investigations with plants involving chemicals, physical injuries from using and growing, and some hazardous forms of plants.

References

Poisonous Plants - a set of 3 posters - RoSPA, Cannon House, The Priory, Queensway, Birmingham B4 6BS - £2.00 each

Take Care - Be Plant Aware a booklet produced by RoSPA, one copy sent to schools in 1995, contact Client Services if you require a further copy

Handle with Care - an article in April edition of BBC magazine, Gardeners World

Poisonous Plants and Fungi - An Illustrated Guide - HMSO £9.96 (recommended purchase for schools)

Poisonous Plants in Britain and the Effects on Animals and Man - HMSO £12.95

Code of Practice for the Labelling of Potentially Harmful Plants - Horticultural Trades Association, 19 High Street, Theale, Reading, Berkshire RG5 5AN - £3.50

Safety in Science Education - DfEE 1996

Contacts

DEHSSA (see 'Contacts List' in the Devon Education Health and Safety Manual)

Client Support Devon

The Science Advisory Team (Curriculum Issues)