

Student safety sheets

Plants, fungi and seeds

See also CLEAPSS Student Safety Sheet 75: Fieldwork

Substance	Hazard	Comment
Plants and fungi	TOXIC	Some plants, eg cacti, have spines which can cause deep puncture wounds and other spines may cause skin irritation. Other plants, eg Euphorbia have irritant or poisonous sap. Nettles are well known but hyacinth bulbs can also cause dermatitis (skin rash), as can bulbs of other members of the liliaceae family such as daffodils, tulips and primulas. Many common garden and hedgerow plants are poisonous or have toxic parts.
	IRRITANT	Some Umbellifers, eg giant hogweed, can cause photosensitisation after skin contact, resulting in blisters on exposure to light.
		Some plants used as common food sources may have poisonous parts, eg rhubarb leaves and the green parts of the potato (including the tuber) and tomato.
		Some fungi are very poisonous and easily mistaken for the common (field) mushroom.
		Pollen from some plants can produce an allergic reaction in susceptible individuals, commonly known as hay fever.
		Plant material collected from farming areas may have been contaminated with pesticides, although most rapidly break down after spraying.
		Wild plants are protected by law. It is illegal to uproot, pick or destroy certain highly protected plants and it is illegal to uproot any plant without the landowner's permission.
Seeds	()	Some seeds are very poisonous, eg castor oil, laburnum. French beans or red kidney beans are poisonous unless cooked.
	IRRITANT	Seeds bought from commercial suppliers are often treated with a pesticide to prevent attack by insects or fungi. Seeds from health food stores will not have been treated.
		The effects of radiation on plant growth are often investigated using seeds that have been exposed to gamma-radiation. Such seeds are NOT radioactive.

Typical control measures to reduce risk

- Check reliable sources to find if there are hazards in any plants in your garden, in the neighbourhood or in school.
- Where possible, use seeds known to be pesticide free or rinse the seeds in running water for several hours.
- Treat unknown plants with caution; never taste or eat a plant unless it is definitely known to be non-poisonous.
- Wash hands in warm soapy water after handling seeds and other plant material.
- Wear gloves when handling plants likely to cause irritation or seeds treated with pesticides.

Assessing the risks

- What are the details of the activity to be undertaken? What are the hazards?
- What is the chance of something going wrong?
- How serious would it be if something did go wrong?
- How can the risk(s) be controlled for this activity?

eg can it be done safely? Does the procedure need to be altered?

Emergency action

In all emergency situations, alert the responsible adult immediately. Be aware that actions may include the following:

•	Skin rash from irritant plants	Cool the affected area with cold water (if available) and cover with a sterile dressing. You might self-medicate using a traditional remedy by rubbing a nettle sting (acidic) with a dock leaf (alkaline).
•	Poisonous seeds swallowed	Do no more than wash out the mouth with drinking water. Do not induce vomiting. Consult a medic.

74