



SURVIVAL CODE



MEDICINAL PLANTS



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MEDICINAL PLANTS

NATURAL MEDICINE

Natural remedies are available for many human illnesses if you know where to look. For thousands of years drugs and treatments have made use of all kinds of herbs, plants and natural substances and many of the drugs still in use today are derived from plant sources. Not all the traditional medicines have been endorsed by modern doctors; some were based more on an association of the plant than with its medical properties - though strangely, colour and appearance does often seem to be indicative. Plants such as scarlet pimpernel and burdock, used to clear the blood, are mainly red; those that treat jaundice, including agrimony, hawkweed and dandelion, are yellow. Sometimes a name reminds us of the old medical usage — lungwort for instance, or eyebright.

Cruel to be kind

Sick survivors need your care and attention, but they must also be kept interested and optimistic. If a man with pneumonia is left to curl up in a corner of the shelter, he will probably die. Get him on his feet and keep him occupied with minor tasks. Give him plenty of fluids and coax him to eat. Do not let him lie down. The hepatitis case must be forced to eat. You cannot allow either strength or morale to be depleted.

It is not only plants that can replace your medical supplies, or to supplement your store. Urine can be used as an antiseptic to wash out wounds. If the patient is fussy, use their own. If sick enough, they won't care whose. Maggots too have been used to clean wounds. In tropical countries an open wound is soon infested with them - but they do keep it open and clean until better treatment can be given. Keep watch that they do not devour good tissue.

Fire has been used for centuries to clean wounds. Cauterizing with heat requires fortitude in the patient - but, if they can stand it, and you have ammunition, placing powder around a wound and lighting it can prevent gangrene. Some people believe that the best way to seal a stump after an amputation is to cauterize (as used to be done to criminals who had their hands chopped off) — but the shock of this on top of the shock of injury will kill some people.

Modern drugs

Many modern drugs such as cocaine, morphine and digitalis are derived directly from plants, but extracting them is NOT straightforward. Often poisons are involved which could be VERY DANGEROUS if any attempt was made to use such plants in treatment. What follows is a list of plants and the medical uses to which the survivor can put them - in simple preparations. Although many modern drugs are made from tropical plants, and indigenous medicine has many plant ingredients, most of these plants are found in temperate regions for they are the ones which have been most documented and which you have a reasonable chance of recognizing.

Plant preparations

Leave all poisonous plants alone and be sure that you have properly identified the plant. As a general rule plants will be most potent when in flower. Note that different parts of a plant may have different uses.

Infusions are usually made from leaves or flowers and decoctions from roots. The methods are described below.

Divide the amount made into three doses to take in one day. Always prepare infusions, decoctions and poultices freshly, just before using. Never keep for more than 12 hours.

Plants vary in potency depending on the season in which they are picked. Do not think you will do more good by taking or administering larger doses - you won't and you may do harm.

Don't expect miracles overnight. Give the treatment a fair chance to work.

To make an infusion

Cut and crush the herb so that juices and oils are more readily available. You need a slack handful of herb to a half-liter (³Apt) of water (30g to **50cc/1oz** to 20fl.oz). Pour boiling water over it. Stir. Leave to cool. There is no need to strain the herb will sink to the bottom.

If you cannot boil water use half the amount of cold water and stand the vessel in the sun. If there is no sun or no water try sucking or chewing the leaves, extracting as much of the juices as possible, then spit out the pulp.

To make a decoction

This is usually a preparation from roots. Cut, scrape and mash root. Soak in water (handful to 85cc/1¹/₂pt) for at least half an hour. Bring to boil, simmer until liquid reduces by one-third.

To make a poultice

Mash up root, leaves or all of the herb and make into a flat pad. If too dry add water. Apply to affected part and cover with a large leaf, bind in position. Poultices can be applied to stiff joints, sprains and pus-filled sores.

Expressed juice

Reduce stem and leaves of the plant to a juicy mush by crushing with hands, rocks or sticks. Squeeze juice only into a wound and spread pulp around infected area. Keep in place with a large leaf and bind.

Splinting agents

The roots of Comfrey and, to a lesser extent, Solomon's seal, are so rich in starch that they will set

hard when they have been well boiled and reduced. Allow to cool slightly and pack around an injured limb or joint. Good for holding poultices.

REMEDIES

STOPPING BLEEDING

Dove's-foot crane's-bill: Expressed juice
Giant puffball: Packed as poultice
Periwinkle: Expressed juice of leaves
Plantains: Pounded leaves as poultice
Self-heal: Expressed juice
Stork's-bill: Expressed juice of leaves
Woundwort: Expressed juice

CLEANSING RASHES/ SORES/WOUNDS

NOTE: Use these plants externally to bathe the skin or where indicated, as a poultice. Apply two or three times a day.

Burdock: Decoction of root; crushed raw root and salt for animal bites
Camomile: Infusion of flowers as poultice
Chickweed: Expressed juice of leaves
Cleavers: Infusion of whole plant, except roots
Comfrey: Decoction of root as poultice
Dead-nettle: Infusion of flowers and shoots
Docks: Crushed leaves
Elder: Expressed juice of leaves
Elm: Infusion of bark
Horehound: Infusion of whole plant, except roots.
Mallow: Decoction of leaves and flowers as poultice
Marsh mallow: Decoction of root infusion of leaves and flowers; as poultice
Oak: Decoction of bark
Sanicle: Infusion of whole plant, except roots
Scurvey grass: Crushed leaves
Shepherd's purse: Infusion of whole plant, except roots; as poultice
Silverweed: Infusion of whole plant, except roots
Solomon's seal: Decoction of roots; as poultice
St John's wort: Infusion of flowers and shoots
Sorrel: Crushed leaves
Tansy: Crushed leaves

Watercress: Expressed juice
Woundwort: Infusion of whole plant, except roots
Yarrow: Infusion of whole plant, except roots

ANTISEPTIC

NOTE: These plants can be used externally or internally. They are particularly useful for wounds that become infected.

Garlic: Expressed juice
Mallow: Infusion of leaves and flowers
Marshmallow: Decoction of root; infusion of flowers and leaves
Horseradish: Decoction of root
Thyme: Infusion of leaves and flowers

ACHES/PAINS/BRUISES/STIFFNESS

NOTE: Where indicated, use externally.

Balm: Infusion of leaves
Birch: Infusion of leaves
Borage: Infusion of whole plant, except roots
Burdock: Decoction of root
Camomile: Expressed juice of flowers applied to swellings
Chickweed: Infusion of whole plant, except roots
Comfrey: Decoction of root applied to swellings
Cowberry: Infusion of leaves and fruits
Dock: Crushed leaves applied to bruises
Dove's-foot crane's-bill: Infusion of whole plant, except roots, applied to swellings
Elm: Infusion of bark
Figwort: Decoction of whole plant except roots; use externally to draw bruises and blood clots
Garlic: Expressed juice applied to swellings
Horehound: Expressed juice or leaves to earache
Poplar: Infusion of leaf buds
Solomon's seal: Decoction of root; use externally
Sorrel: Crushed leaves applied to bruises St John's wort: Infusion of flowers and shoots applied to bruises
Tansy: Crushed leaves applied to bruises
Willow: Decoction of bark

FEVERS

NOTE: These plants will induce perspiration to break a fever.

Camomile: Infusion of leaves and flowers
Elder: Infusion of flowers and fruit
Elm: Decoction of bark
Feverfew: Infusion of whole plant, except roots

Lime: Infusion of flowers

COLDS/SORE THROATS/RESPIRATORY

Agrimony: Infusion of whole plant, except roots

Angelica: Decoction of root

Bilberry: Infusion of leaves and fruits

Bistort: Infusion of whole plant, except roots

Borage: Infusion of whole plant, except roots

Burdock: Decoction of root

Camomile: Infusion of flower; use as gargle

Colt's-foot: Infusion of leaves and flowers

Comfrey: Infusion of whole plant

Great mullein: Infusion of whole plant, except roots; decoction of root as gargle

Horehound: Infusion of whole plant, except roots

Horseradish: Raw root

Lime: Infusion of flowers

Lungwort: Infusion of whole plant, except root

Mallow: Infusion of flowers and leaves

Marshmallow: Decoction of root; infusion of leaves and flowers

Mint: Infusion of whole plant, except roots

Mountain evens: Infusion of whole plant; use as gargle

Nettle: Infusion of leaves

Oak: Decoction of bark, use as gargle

Plantain: Infusion of leaves and stems

Poplars: Infusion of leaf buds

Roses: Decoction of hips

Saniele: Infusion of whole plant, except roots

Self-heal: Infusion of whole plant, except roots; use as a gargle

St John's worth: Infusion of flowers and shoots

Thyme: Infusion of leaves and flowers

Willow: Decoction of bark

Yarrow: Infusion of whole plant, except roots; use as inhalant

SETTLING STOMACH

Bolm: Infusion of leaves

Bilberry: Decoction of fruit

Bracken: Infusion of leaves

Bramble: Infusion of leaves

Dandelion: Decoction of whole plant

Horseradish: Infusion of root

Mint: Infusion of whole plant, except roots, with crushed charcoal

Solomon's seal: Decoction of root

Saniele: Infusion of root

Yarrow: Infusion of leaves and flowers

DIARRHEA

NOTE: Take two or three times daily until symptoms subside.

Bilberry: Decoction of fruit
Bistort: Infusion of whole plant, except roots
Bramble: Infusion of leaves or decoction of fruit
Cowberry: Decoction of fruit
Elm: Infusion of bark
Great burnet: Infusion of leaves and shoots
Hazel: Infusion of leaves
Marshmallow: Infusion of leaves and flowers; decoction of root
Mint: Infusion of whole plant, except roots
Mountain evens: Infusion of whole plant, except roots
Oak: Decoction of bark
Plantain: Infusion of leaves and stems
Periwinkle: Infusion of leaves; NOT to be used for long periods
Silverweed: Infusion of whole plant, except roots

CONSTIPATION

Agrimony: Infusion of whole plant, except roots
Barberry: Expressed juice of fruit
Common cleavers: Infusion of whole plant, except roots
Couch grass (**Elymusj**): Decoction of root
Dandelion: Decoction of whole plant
Elder: Expressed juice of fruit
Feverfew: Infusion of leaves and flowers
Rowan: Expressed juice of fruit
Rose: Decoction of hips
Walnut: Decoction of bark

HEMORRHOIDS

NOTE: Apply externally, two or three times a day

Bilberry: Expressed juice of fruit
Camomile: Infusion of leaves and flowers
Elm: Decoction of bark
Lesser celandine: Expressed juice of leaves
Oak: Decoction of bark
Plain tain: Expressed juice
Poplar: Decoction of leaf buds
Silverweed: Infusion of whole plant, except roots
Solomon's seal: Decoction of root

BE AWARE

For Headaches: Willow* leaves and bark make a decoction containing Salicin, a constituent of Aspirin.

For Healing: Express the juice from Comfrey leaves to aid tissue regrowth.

EXPELLING WORMS

Bracken: Infusion of roots

Feverfew: Decoction of leaves and flowers

Fig wort: Infusion of whole plant, except roots

Tansy: Infusion of leaves and flowers; use sparingly in small amounts

Tropical Medicinal Plants

Many thousands of tropical plants are known to have medicinal properties and are used by tribal peoples. Relatively few have been studied by Western scientists or are widely known. The following are a few of the many plants which may be of use, but lacking accurate information on medicinal plants you will do better to take medicines with you. NEVER experiment with something you cannot positively identify.

Copper leaf (*Acalypha indica*) is one of several similar shrubs in India and Southeast Asia, reaching 2-3m (6- 10ft), with oval to heart-shaped leaves that are often variegated in shades of red, bright pink and green. In Malaya, the leaves are dried and drunk like tea. A decoction of roots and leaves is laxative and restorative.

Alstonias, including **Alstonia scholaris** are found from India east to Philippines and south to Indonesia and parts of Australia. Boil the bark in water to produce a tonic, reduce fever, relieve diabetes and kill internal parasitic worms.

Antelaea azadirachta occurs from India to China and Indonesia. A decoction of leaves and bark will help to suppress malaria and dysentery. Use oil from seeds to treat ulcers and skin complaints.

Bruceas occur in many, fairly similar forms from India east to China and south to Australia. All parts are bitter tasting. Take seeds of **Brucea sumatrana** for diarrhea and dysentery. Crushed leaves relieve external bleeding and sooth boils and insect bites.

Elettaria cardamomum is a relative of ginger, found in India eastwards, and is a tall, herbaceous plant with thick, fleshy rhizomes and a long, branched head of flowers. Use seeds or expressed juice of fruit for settling the digestion and relieving nausea.

Cinchonas, China Barks or Red Barks (**Cinchona**/ large trees, typically with red-brown trunks, wild in tropical South America, have been taken all over the world. Take a decoction of the quinine-containing bark to suppress malaria.

Horseradish Tree (*Moringa oleifera*, see **Tropical plants in Foodj** is a fairly common edible plant of the tropics. Use expressed juice from the roots and leaves to treat skin eruptions and inflammations.

Kibatalia arborea is another Asian tree whose bark, when cut, yields a latex-like sap. Use this sap, in small amounts, to treat worms.

Sida cordifolia is an erect, downy annual, up to 1m (3ft) tall, with oblong toothed leaves and yellowish flowers. It occurs from India east to Taiwan. Use an infusion of the leaves for coughs and fevers. The seeds are mildly laxative.

Pergularia extensa has stems with stiff spreading hairs, broadly oval leaves up to 15cm (6in) long and small greenish-white flowers. It grows in tropical Africa. Use tender leaves and shoots as a potherb or in a strong infusion to treat tapeworm and diarrhea. Use a poultice of leaves on boils, abscesses and wounds.

Crateava religiosa is found from India east to Papua New Guinea and Polynesia. A decoction of bark and leaves relieves upset stomachs, feverish aches and pains.

Baobabs (*Adansonia*, see **Desert plants** in **FoodJ**) Scrape gum off the bark. Use to treat worms and diarrhea.

MEDICINAL PLANTS

These medicinal plants are found in temperate climates. Many are very common and all are quite safe. Use them to staunch bleeding and heal wounds, for fevers, colds and digestive upsets and other treatments as described. Some have several uses, but they have been grouped here under their most common applications.

GENERAL AND ANTISEPTICS:

1. **Eyebright** (*Euphrasia officinalis*) grows to about 30cm (1ft), with oval, often downy leaves and white flowers tinged violet or purple-veined and with a yellow spot in grassy places, often in mountains, in Eurasia. A strained infusion of the whole plant is excellent for eye infections. It is also said to ease hay fever, catarrh and nasal congestion.



2. **Garlics** (*Allium*) occur in many varieties in most temperate and, now, tropical parts. The smell will lead you to them; most have long, strap-like leaves arising from the bulb and a tall stem topped with a cluster of small pinkish or white flowers. The bulb is powerfully antiseptic; use as expressed juice externally diluted with water to treat wounds and swellings, and eat garlic to treat and to prevent colds. It also contains a natural antibiotic.



3. **Wild Thyme** (*Thymus serpyllum*) is small, aromatic, mat-forming, with small oval leaves and reddish-purple flowers; in dry grassy places in western Eurasia, but other species occur elsewhere. Use its antiseptic qualities in an infusion for coughs and colds, or as a potherb.



4. **Figwort** (*Scrophularia nodosa*) grows to 90cm (3ft), with square stems, pointed oval leaves and red- brown flowers; in woods, clearings and scrub in Eurasia - there is many different kinds. Apply as a decoction to reduce swellings, sprains, boils and bruises, to dissipate blood clots, and for treating hemorrhoids.



BLEEDING:

1. **Self-heal** (*Prunella vulgaris*) is a downy, creeping plant with pointed oval leaves and heads of violet flowers; in dry grassy and waste places in Eurasia. Use as expressed juice to staunch bleeding or by infusion for internal hemorrhage.



2. **Dove's-foot Crane's-bill** (*Geranium molle*) grows to 30cm (1ft) with a hairy stem, deeply lobed leaves and small, pinkish, five-petaled flowers; in dry grassy and waste places. Use as expressed juice to staunch bleeding or as a decoction for internal hemorrhage.



3. **Marsh Woundwort** (*Stachys palustris*) is strong-smelling, hairy, up to 90cm (3ft) tall, with toothed, heart-shaped leaves and spikes of dark pink to purple, white-blotched flowers; usually found in damp places; similar species by woodland edges and shady waste place. Use as expressed juice to staunch bleeding or by infusion for bathing aches, sprains and wounds.



4. **Sanicle** (*Sanicula europaea*) grows to 50cm (20in), with hand-shaped, deeply lobed leaves and tiny white or pinkish flowers in a compact head; widespread in woodland in Eurasia. Use as expressed juice to staunch bleeding or by infusion for internal hemorrhage.



5. **Greater Periwinkle** (*Vinca major*) grows to 50cm (20in), with leathery, evergreen, broadly spear-shaped leaves and large blue-violet flowers; in woody, scrubby and rocky places in Eurasia. There are many kinds of periwinkle in other parts of the world. Use expressed juice externally to staunch bleeding.



Plantains (see Edible plants in Food) provide juice for treating wounds and for treating chest complaints..

INTESTINAL PROBLEMS:

1 **Mountain Avens** (*Dryas octopetala*) resembles a creeping wild strawberry, with well-lobed leaves, paler below, and large white, yellow-stamens flowers; in mountainous rocky and northern Arctic areas. Use an infusion of stems, leaves and flowers for diarrhea or as a gargle.



2 **Balm** (*Melissa officinalis*) is lemon-scented and hairy, growing to about 60cm (2ft), with toothed, oval, greenish-yellow leaves and whorls of small white flowers at the leaf bases; in grassy places in the warmer part of Eurasia. Use an infusion of the whole plant for fevers and nausea. Can also be used to ease painful menstruation.



3 **Water Mint** (*Mentha aquatica*) is aromatic, hairy, always near fresh water, with toothed, pointed oval leaves, a purplish stem to 80cm (32in) and clusters of pinkish flowers. Use an infusion of the leaves for diarrhea, as a digestive and heated to induce perspiration in fevers. Similar mints are also effective. If made too strong the infusion may become emetic (cause vomiting).



4 **Elms** (*Ulmus*) are tall trees with large, oval, toothed leaves; green disc shaped fruits and, often, suckers at the base of the trunk. Use a decoction of the bark for diarrhea and skin eruptions.



5 **Cleavers or Goosegrass** (*Galium aparine*) is straggling, with long prickly stems, whorls of narrow prickly leaves and small white flowers; widespread on moist, woody and waste ground. Young plants can be boiled and eaten like spinach. Use an infusion to ease constipation. Give frequent doses, mixed with an equal quantity of Marsh Mallow for cystitis.



6 **Agrimony** (*Agrimonia eupatoria*) grows to 90cm (3ft), with a downy stem, toothed, spear-shaped leaflets, greyish below, and a tall spike of yellow flowers; in dry grassy places – there are several different kinds. Use an infusion of the whole plant to ease constipation and acid stomach. Also use to treat cystitis, giving small doses frequently.



7 **Lesser Celandine** (*Ranunculus ficaria*) grows to 20cm (8in), with shiny, dark green, heart-shaped leaves and yellow flowers, in wet woodland and damp ground in Eurasia. Apply the expressed juice externally for hemorrhoids; do NOT confuse with its poisonous relatives, the buttercups.



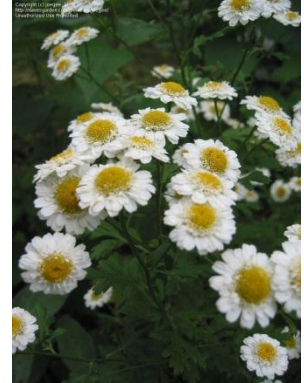
8 **Solomon's Seal** (*Polygonatum*) are small, patch-forming, with arching stems bearing tube-shaped greenish- white flowers; in woody, scrubby areas. Use a decoction of the root externally for hemorrhoids and bruises, or take an infusion for nausea. The starchy root is edible like parsnips, but when boiled and dried it sets hard as makeshift plaster for a splinting agent either an infusion, or a poultice made from the powdered root, will ease bruising. Berries are POISONOUS.



Silverweed (see Edible roots in Food) also provides an infusion for the treatment of digestive disturbance and hemorrhoids.

FEVERS, COUGHS AND COLDS:

9 **Feverfew** (*Tanacetum parthenium*) is very aromatic, growing to 45cm (18in), with delicate yellowish leaflets and many daisy-like flowers; in waste and grassy places in Eurasia. Eating the leaves eases headaches and migraines, but in some people this can cause blistering in the mouth. It is safer to use an infusion of the whole plant for fevers, headaches and general pains, or as a tincture for insect bites. Frequent small doses of a hot infusion help regulate contractions in childbirth.



FEVERS, COUGHS AND COLDS CONTINUED:

1. **Camomile** (*Chamaemelum nobile*) is aromatic, creeping, with finely dissected leaves and daisy-like flowers; in grassy places in Eurasia. Use an infusion of the whole plant for fevers, headaches, migraines, and colds, or the expressed juice of the flowers for aches and strains. It has a calming influence especially on nervously excited children.



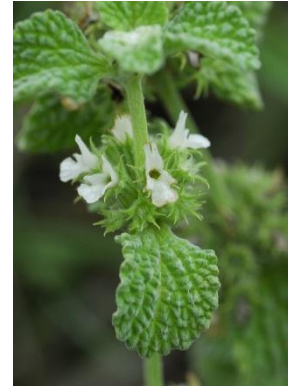
2. **Colt's Foot** (*Tussilago farfara*) is common from late winter on bare and waste ground. Large, yellow dandelion like flowers top asparagus-like stems; heart-shaped leaves follow the flowers. Use the leaves by infusion for colds and coughs.



3. **Lungwort** (*Pulmonaria officinalis*) is downy, up to 30cm (1ft), with pale-spotted spear-shaped leaves and bell-shaped pink or purplish-blue flowers; in mixed woods and scrub in Eurasia. An infusion of the whole plant is excellent for chest complaints and useful for diarrhea. For coughs use with equal parts of Colt's Foot.



4. **Horehound** (*Marrubium vulgare*) is thyme-scented, downy, with squarish stems to 50cm (20in), roundish, crinkly, greenish-white leaves and whorls of whitish flowers; in dry scrubby places in Eurasia. Use an infusion of the whole plant for chills and respiratory disorders; oil expressed from the leaves soothes earache. It is a good cough treatment for children. In large doses it is a laxative.



5. **Yarrow** (*Achillea millefolium*) is downy, aromatic, up to 60cm (2ft), with dissected, feathery, dark green leaves and heads of tiny white or pink flowers; in grassy places. Use an infusion of the whole plant, but NOT the roots, for colds and fevers. It also hastens clotting of the blood in an injury and reduces blood pressure and bleeding in hemorrhoids.



6. **Musk Mallow** (*Malva moschata*) grows in grassy and scrubby places to about 60cm (2ft), with a hairy stem, deeply divided leaves and large, pink, five-petal led flowers. Mallows are widespread and come in many varieties. Use this like Marsh Mallow (8).



7. **Tree Mallow** (*Lavatera arborea*) grows to 3m (9ft), with a hairy stem, woody at the base, ivy-shaped leaves and pink-purple flowers streaked darker purple; in rocky coastal areas from Europe to Asia Minor. Use this like Marsh Mallow (8).



8. **Marsh Mallow** (*Althaea officinalis*) grows to 90cm (3ft), downy grey, with large lobed leaves and pale pink flowers. The cooked root is excellent to eat Use an infusion of the whole plant for chest complaints or one just of the root to relieve giddiness caused by loss of blood and to clean wounds and sores. A rubbing with bruised leaves soothes insect bites; boiled leaves are a good poultice for skin eruptions. An infusion of the leaves will relax and soothe irritation and inflammation of the alimentary system.



9. **Great Mullein** (*Verbascum thapsus*) is covered in pale woolly down, growing to 2m (6ft), with large spear-shaped leaves and a dense spike of five-petaled yellow flowers; in dry, warm grassy places. Use an infusion of flowers and leaves for coughs and chest complaints, or a decoction of the root as a gargle. Powder the flowers to make a sedative and pain- relieving tea.



10. **St John's Wort** (*Hypericum perforatum*) grows to 60cm (2ft), with small, oblong, translucently spotted leaves and a head of golden-yellow flowers that exude a red juice when crushed; in open woods, grassy and bushy places. Use an infusion of the whole plant for colds and chest complaints.

