

FORAGING IN YOUR BACKYARD: USEFUL WEEDS

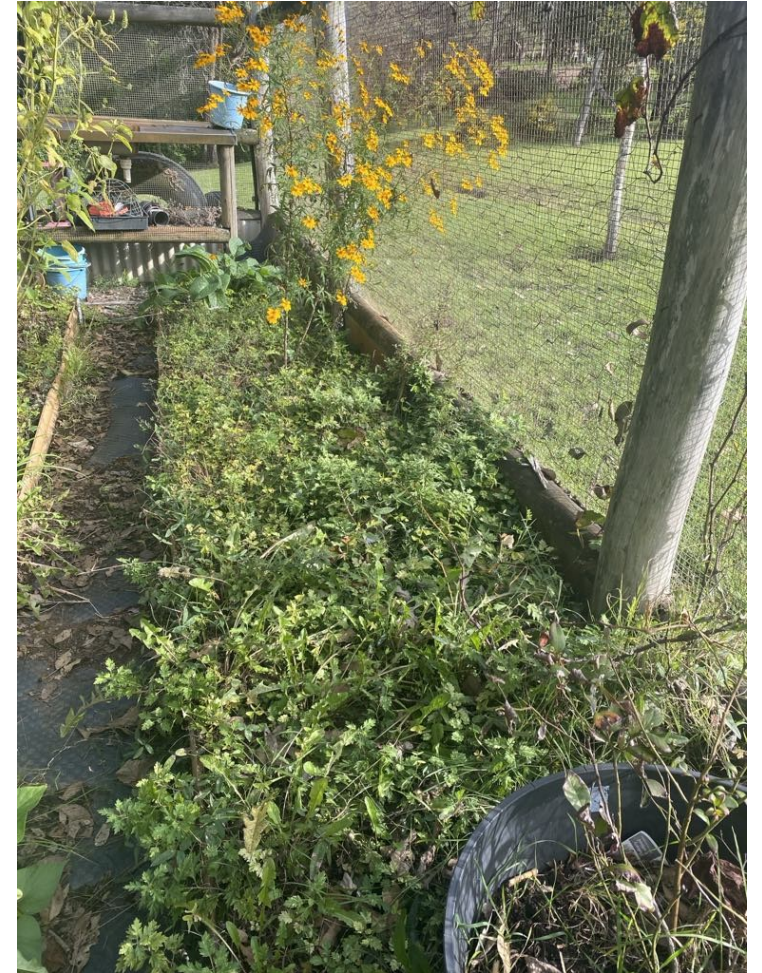
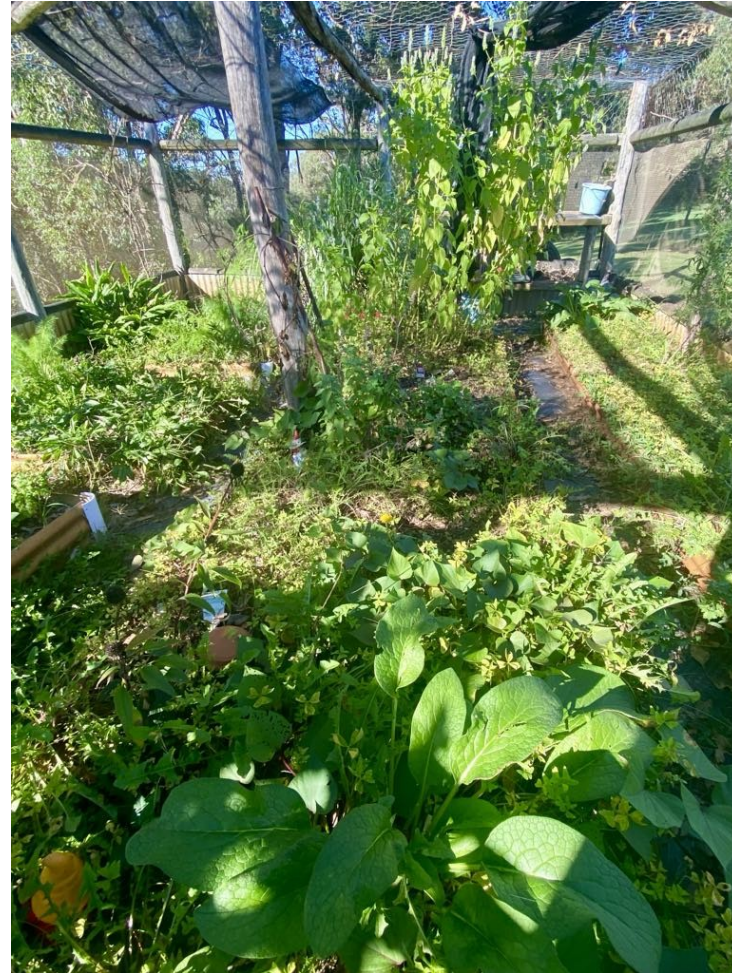


LYN WETZIG

- Bachelor of Health Science (Nutritional Medicine), Australian College of Natural Medicine (now Endeavour College of Natural Health), 2008, with an
- Award for Clinical Excellence in Nutrition.
- Advanced Diploma of Western Herbal Medicine, Australian Institute of Applied Science, 2015.
- Fellow, Australian Traditional Medicine Society.

Currently, I am consulting on Friday mornings at Bamboo Pantry Go Vita in Crows Nest. I have been volunteering for some years with U3A teaching nutrition and weeds.

MY WEED AND HERB PATCH



REMEMBER.

This presentation is for general interest, information and will be, I hope, useful - with several caveats:

- **This information is NOT for medical advice.**
- **NEVER** eat or use a plant – or even touch in the case of things like hemlock - unless you are **SURE** of its identification and safety! If you are in doubt, take plants (or a photo!) to a local nursery or horticulturalist for identification.
- **NEVER** use weeds that have been sprayed with herbicides, fungicides, insecticides, and pesticides or from roadsides.
- **WASH** all gathered plants as you don't know what has been romping around in your weeds.
- **Allergies!** If there's a known allergy to any plant, use cautiously or avoid.

Pregnancy/lactation/pre-conception: pretty well avoid anything during these important times.

WHY WEEDS?

Weeds can be medicine and food and they :

- **Are easy to grow**
- **Are nutrient rich.**
- **Add diversity to our diet.**
- **Can tell us what our soil is like.**
- **Can be beneficial to our gardens.**
- **Can taste good!**
- **Sequester carbon from the atmosphere, acting as a carbon sink.**

OXALIC ACID



Most weeds are fairly high in oxalic acid (as is spinach). Problematic if you're low in calcium and/or vitamin D.

Treat wild greens as you would spinach – eat young leaves; blanch, steam, boil or wilt your greens and dispose the water leaches out roughly one third of the total oxalic acid – most of the *soluble* oxalic acid, the troubling kind. The insoluble oxalates that remain largely pass right through us.

If you're prone to kidney stones, gout or thyroid issues, be careful of the amount of oxalic acid you consume.

Avoid high oxalic acid foods or eating lots of them, if you have any risk factors, but otherwise:

- Do not eat unreasonably huge quantities of high oxalic acid foods in one sitting,
- blanch and discard water if you are eating high oxalate foods for extended periods,
- food combine high oxalic acid foods with high calcium foods,
- if you've had antibiotics, take probiotics and unpasteurised fermented foods to recolonise your gut,
- stay hydrated,
- eat a well-rounded healthy diet... in which weeds can play a starring role.

HOSPITALS USED HERBS AND WEEDS DURING WARTIME. PLANTS THEY USED INCLUDED:



rosemary

Nettle (*Urtica dioica*) (high in iron so was used for blood loss)

Valerian (*Valeriana officianalis*) (a sedative)

Wild Thyme (*Thymus polytrichus*) (an antiseptic)

Burdock (*Arctium spp*) (a diuretic)

Rosemary (*Salvia rosmarinus*) (to purify the air of hospital wards)

Foxglove *Digitalis purpurea* (to regulate heart beat)

Deadly Nightshade (*Atropa belladonna*) (atropine was an antidote to nerve gas poisoning; also to dilate eye pupils during eye surgery)

Yarrow (*Archillia millefolium*) (to staunch bleeding)

Russian Dandelion (*Taraxacum kok-saghyz*) (latex used as a substitute for rubber)

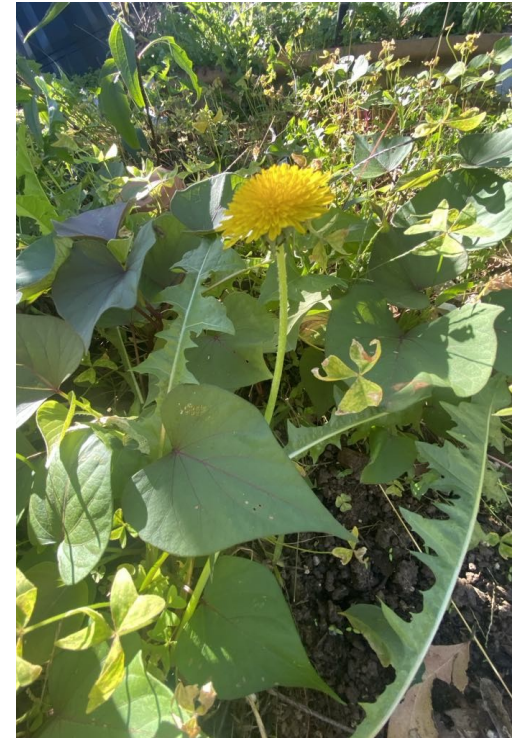
Garlic (*Allium sativum*) (Russia's antibiotic of choice)

Peat Moss (*Sphagnum spp*) - an effective bandage with antiseptic and absorbent qualities.

Dandelion : *Taraxacum Officinale*

- Used as spring greens after a winter of dried meat, grains and root vegetables.
- Leaves have **8 times more antioxidants, 2 times more calcium, 3 times more vitamin A, and 5 times more vitamin K and vitamin E** than spinach.
- Eat leaves raw, steamed, boiled, and added to soups and stews.
- Used as food and medicine for thousands of years; well known to civilizations from China to Egypt.
- Pick the **leaves** before flowering, and eat in salads or steam as you do spinach.
- Whole plant use: **flowers** made into syrups, the **leaves** as a tea, and the **roots** can be roasted and ground as a coffee substitute.

Dandelion leaf tea is a safe diuretic as it is high in potassium; useful in hypertension, digestive liver insufficiency, dyspepsia, oedema, and constipation, gall stones and cholecystitis. No real major safety issues with dandelion leaf tea.



DANDELION (CONT'D):

Dandelion leaf can inhibit the SARS Covid spike protein from binding to the (Angiotensin Converting Enzyme) **ACE2 receptors** on cells. May help with negative effects after Covid-19 and/or vaccination.

[*Dandelion extract inhibits SARS-CoV-2 in vitro \(news-medical.net\)*](#) Also [*In Vitro Effect of Taraxacum officinale Leaf Aqueous Extract on the Interaction between ACE2 Cell Surface Receptor and SARS-CoV-2 Spike Protein D614 and Four Mutants - PubMed \(nih.gov\)*](#)

- High margin of safety with dandelion leaf ; dosage : start with 1-2 cups of tea and increase to 3-4 cups a day Few contraindications but avoid in hypersensitivity, gall bladder disease, or active peptic ulcer. Dandelion extract is also high in potassium which may potentially cause hyperkalemia – watch with potassium sparing diuretics.
- **Dandelion root** - bitter tonic, mild laxative and diuretic, antirheumatic, useful for liver insufficiency, dyspepsia, constipation.

Nutritionally, dandelion is:

- High in polyphenols - anti inflammatory and antioxidant (fighting against free radicals which cause damage).
- A good source of beta-carotene, body converts to vitamin A - necessary for eyesight (night blindness), healthy skin and immune system.
- High in vitamin C – helps absorb iron, white blood cell function, blood vessel strength and an antioxidant.
- A source of vitamin K – which helps build bones and in blood clotting.
- Ideal source of minerals – potassium (regulates fluid in the cells and helps regulate heart rate and blood pressure); calcium, manganese, iron and magnesium.
- Also contains alpha-carotene, lutein, cryptoxanthin and zeaxanthin – necessary for eye health.

DANDELION (CONT'D) FAMILY: *ASTERACEAE*

- ***In the garden:*** Dandelion indicates heavy, compacted, acidic soil, but also grows pretty well anywhere. . Lots of dandelions indicate a soil very low in calcium and humus with good drainage, and very high in potassium and chloride. Dandelion's long taproots bring up calcium and other minerals from the subsoil. These can enrich the garden as dandelion decomposes. Earthworms love this plant. Dandelion will improve poor soils.

Look-a-Likes:

Catsear (*Hypochaeris radicata*) also grows from a rosette of leaves at the base. However, these leaves can be rounded at the ends and have a furry or hairy texture – hence *cat's ear*. The other differentiation is where dandelion has one flower per stalk, catsear usually has more than one flower per stalk.

Sow Thistle (*Sonchus oleraceus*) usually has many flowers sprouting out on each stalk and leaves grow all the way up the stalk.

- Both are edible.

PLANTAIN: *PLANTAGO MAJOR* AND *PLANTAGO LANCEOLATA*

Both like compacted soil; indicates soils high in calcium, phosphate, potassium, magnesium and other minerals. Ribwort grows in pastures, lawns, roadsides and wastelands; *P. major* prefers lawns, and wherever the soil is damp.

Eat young leaves raw (cook older leaves). Collect seed heads and chop finely to add to smoothies, or winnow and sift to use instead of Psyllium husks (derived from cultivated *Plantago psyllium*) in your cereal, smoothies, breads or a tea.

Called the “bandaid plant”. It helps to stop bleeding, supports tissue healing, and is naturally anti inflammatory and anti bacterial. If cut yourself or something bites you, simply grab a leaf and chew or crush the leaves and apply directly to the skin as a “spit bandaid”



PLANTAIN (CONT'D): FAMILY: *PLANTAGINACEAE*

- Plantain is a good source of bioavailable zinc, calcium, iron, manganese, copper and vitamin C.
- Useful for mucous membranes, so good for coughs and colds.
- Infuse into a strong tea for an eye compress, spritz onto sunburn, apply to itchy skin and rashes, and dab on acne and eczema. When consumed as an infusion, it may help with colds, sore throats, allergies, sinus, chest congestion, and some digestive issues.
- To make a plantain infusion, pop three handfuls of fresh cleaned leaves into a one-litre jar with boiling water. Steep overnight, strain the plant material, and it's ready to use. As a tea, add peppermint leaves or a slice of lemon or honey as most weedy teas taste like grass!

GALINSOGA PARVIFLORA: “GALLANT SOLDIER”, “POTATO WEED” OR “QUI CKWEED”



Family *Asteraceae*. Originally from South America.

In the garden: *Galinsoga* indicates soil low in Calcium, high in Potassium and Magnesium with poor humus, high moisture, poor drainage and hard pan.

Traditionally used for treatment of various ailments eg malaria, flu, cold, colorectal cancer, liver problems and inflammation. Also for nettle stings, bug bites, cuts and rashes. An astringent, so useful for bleeding, snake bites, diabetes, vomiting and hypertension. Stems, leaves, flowers, and seeds can be used raw or cooked and eaten in smoothies, salads, stews or juiced. Research shows that *G. parviflora* possesses antibacterial, antifungal, antioxidant and antidiabetic properties.

It is a hyper-accumulator of cadmium, so can be used to draw cadmium from soils. Do not use if cadmium may be present in the soil – batteries, leadlighting, metal smelting, cigarettes, phosphate fertilized soils, and some solar panels.

SHEPHERD'S PURSE
CAPSELLA BURSA-
PASTORIS

FAMILY: -
BRASSICACEAE
(MUSTARD FAMILY)



- Native to eastern Europe (especially Turkey) and western Asia, now naturalized around the world.
- Typically grows in recently disturbed soil, wild meadows, woodland edges, farmed fields and roadsides. A serious invasive weed in Australia, as the rosettes can cover the ground. Winter weed – wild birds eat the seeds. Can taint cow's milk and egg yolks.
- Indicates soil very low in calcium and high in magnesium. It is being investigated as a biomarker for heavy metals.
- It is astringent (tightening), haemostatic (helps prevent bleeding), vulnerary (wound healing) and diuretic (helps you lose fluid), so it regulates menstruation, can be used as a tea to stop hemorrhage or bleeding (nosebleeds); corrects high or low blood pressure, helps with kidney infections, gravel and water retention; effective for diarrhoea.
- Winter green either fresh or cooked; seed pods can be roasted. High in oxalates.

GERANIUMS (AND PELARGONIUMS)

- The fruit capsule resembles a crane's bill.
- Most of those “geraniums” in our gardens are actually *Pelargoniums*. Geraniums are native to Europe, Pelargoniums were brought to Europe from South Africa –we have our own native geraniums and pelargonium here in Australia.

Medicinal Uses of Wild Geraniums

Wild geranium supports these body systems:

- Digestive
- Integumentary
- Reproductive
- Respiratory



Geraniums are Anticatarrhal, Astringent and Styptic. A wonderful astringent for issues that require the binding action of astringents, e.g. diaorrhea, excessive mucous.

Common usage includes the powdered root as a strong astringent used to stop bleeding, especially for oral inflammations like ulcers. These plants are some of the strongest astringent herbs with up to 30% tannins; the strongest of the species being (*G. masculatum*).

HERB ROBERT:
GERANIUM
ROBERTAINUM
FAMILY: GERANIUM



- **Nutrition:** Carotenoids (vitamin A), B Vitamins (likely B2, B6, and B9), Vitamin C, Iron, Magnesium, Potassium, Calcium, Phosphorus, Germanium
- **Tannins** give it astringency - use it for things that need tightening - a gentle tea for leaky gut, gastro, diarrhoea or even diverticulitis or diverticulosis
- An antioxidant reduces levels of inflammation and therefore helps to prevent numerous diseases. Herb Robert aids liver and gall bladder function; anti-inflammatory especially of the kidney, bladder and gallbladder; also useful for headaches, diabetes, sinus issues, arthritis, high cholesterol, high blood pressure and cancer.
- The fresh leaves can be rubbed on the skin for mosquito bites, arthritis and sciatica. The tea was gargled or swished around in the mouth to relieve sore throats, mouth sores, or toothache. The tea or a poultice has been used externally to relieve eye inflammation, skin irritations, bruises, herpes, swollen breasts (but also to stimulate lactation), fistulas, tumors, ulcers, and inflammations of the tip of the finger or toe
- **As a good source of *germanium*** it helps make oxygen available to the cells which enables the cell to fight disease more efficiently; could be valuable in supporting cancer treatment. Other foods which contain *germanium*: broccoli, celery, garlic, shiitake mushrooms, onions, rhubarb, sauerkraut, tomato juice, and the herbs aloe vera, comfrey, and ginseng.
- Herb Robert also contains **ellagic acid**, which may slow growth of tumours and inhibit cancer spreading. Other food sources of ellagic acid are pomegranates, apples, berries (eg strawberries), walnuts, cashews, etc.

HERB ROBERT (CONT'D):

- Whilst there is no standard dosage for this herb due to limited data, it's important to never have too much of any medicinal herb because they do have an effect on the body.
- Use as a tea – add other herbs like mint, lemon balm, calendula, dandelion, violet...
- **Dosage – Infusion: Pour a cup of boiling water onto 1 teaspoonful of the dried herb and leave to infuse for 10-15 minutes. This should be drunk three times a day.**
- **AVOID IN PREGNANCY, PRE CONCEPTION AND LACTATION.**

PELARGONIUM SIOIDES

FAMILY: GERANIACEAE



-
- Clinical evidence is for the root only. Leaves and flowers are not used.
 - Pelargonium has been traditionally used for upper respiratory infection, bronchitis, acute bronchitis, common cold, and sinusitis.
 - Pelargonium is traditionally combined with Echinacea, Thyme, and Elderberry. These combinations may have synergistic effects. *Always research specific combinations and consult a practitioner before combining herbs.*
 - Used for respiratory and cold remedies.
 - Astringent, tonic and antiseptic effects used internally for debility, gastroenteritis, and hemorrhage and externally for skin complaints, injuries, and neuralgia and throat infections. The essential oil is used in aromatherapy.

SIDA RETUSA/RHOMBIFOLIA. PADDY'S LUCERNE, JELLY LEAF, ARROWLEAF SIDA, QUEENSLAND HEMP, BROOM WEED. **FAMILY: MALVACEAE**

•Cook and eat the leaves as a vegetable, or make a tea. The leaves contain around 7.4% protein. High mucilage content, good for respiratory and sinus. Chewing a couple of leaves can help alleviate both constipation and diarrhea. Contains ephedrine, especially the root – could be useful in bronchial issues. *Sida* may not be allowed in Australia.

•*In various countries:*

•A **decoction** of the whole plant is used for fevers; a **poultice** for headaches, boils, cramps, rheumatism, toothache, chapped lips and pimples; an **infusion** to treat **dysentery**; **juice** of the leaves mixed with vinegar for an anti-inflammatory and digestive remedy; the yellow flowers are **eaten** with wild ginger to ease labour; a **paste** of the root is applied to boils.

•Make a cough syrup from the crushed roots, stems and leaves which soothes the respiratory tract; add peppermint essential oil, sugar, and vinegar. *Pat Collins*



SIDA (CONT'D):

- Besides ephedrine, the plant also contains **cryptolepine** and **vasicine** which are anti microbials. As a processed pharmaceutical powder, **cryptolepine** is used to fight malarial infections and cancerous tumors, and has been shown to be effective against *Staphylococcus aureas*, including MRSA.
- **Vasicine** is a respiratory stimulant and with **theophylline** can help dilate the bronchioles - useful in asthma.
- The plant is found in warm climate countries. A common and widespread weed of disturbed sites, roadsides, pastures, grasslands, open woodlands, crops, waste areas, footpaths and gardens; found on most soil types except some of those derived from limestone and seasonally flooded clays. A declared weed in several states. Long tap root draws nutrients up to the surface making them available to other plants.
- Avoid if trying to conceive and in pregnancy. May lower blood sugar. Avoid roots and unripe seeds.



CHICKWEED: *STELLARIA MEDIA*

FAMILY: CARYOPHYLLACEAE (CARNATION)

- Chickweed prefers shady, moist and rich soils.
- Delicate low growing annual, distinguished by the row of fine hairs on one side of the stems which change sides between each pair of leaves. Do not confuse with Petty Spurge (*Euphorbia peplus* - white sap); Mouse Ear Chickweed (*Cerastium glomeratum* - sticky, hairy leaves) or Scarlet Pimpernel (*Anagallis arvensis* -has square stems, oblong leaves, red or blue flowers).
- Demulcent, astringent, refrigerant, and anti peptic–ulcer. Topically for dermatitis, psoriasis, other chronic skin disorders, wounds, insect bites and burns. Internally, it is good for rheumatism, piles, catarrhal conditions of the lungs, kidneys and bladder. Use as a poultice for boils, abscesses and painful rheumatic joints. Has been eaten for thousands of years; vitamins A, D, B complex, C, rutin, calcium, potassium, phosphorus, zinc, manganese, sodium, copper, iron and silica.
- Cut off the young tops and eat like sprouts in salads and sandwiches, pop in soups, stews, smoothies or juices, or make a whole salad of this herb. Use wherever you would use another green leafy vegetable.

CHICKWEED (CONT'D):

Indicates soil low in magnesium and phosphate, very high in potassium and other minerals.

One way to enjoy *Stellaria* is to make a tea from the fresh (or dried) leaves. It has laxative and diuretic properties, so useful if you're feeling bloated and constipated. It can also help eliminate inflammation in the throat and respiratory tract.

It is a natural sedative and pain reliever, so if you suffer from pain at night, a cup of chickweed tea might help – especially paired with chamomile. Remember it does have diuretic properties too, so don't drink too much!

Allergies are not common for this plant, but of course, there's always the chance. Chickweed is not from the *Asteraceae* family, but from the *Caryophyllaceae* family.

You can also add chickweed tea to bathwater to help relieve itching.

ALPINE OR WOODLAND STRAWBERRY *FRAGARIA VESCA*

FAMILY: ROSACEAE (ROSE FAMILY)



Used for centuries for food and medicine.

Fruits and leaves are rich in tannins, mucilage, salicylates, vitamins and antioxidants. Fruits are small and very sweet and high in fibre.

The leaves can be made into a tea for diarrhoea, gastric inflammation and boosting the immune system and good for heart health. Also benefits blood sugar levels and is a mild diuretic, and anti spasmodic. Astringency can benefit oral health by tighten gums, reducing inflammation and comatting bacteria.

Harvest leaves in spring or early summer and dry in a dehydrator or on paper towels.

WHITE CLOVER *TRIFOLIUM REPENS*.

FAMILY: *FABACEAE* (LEGUME FAMILY)

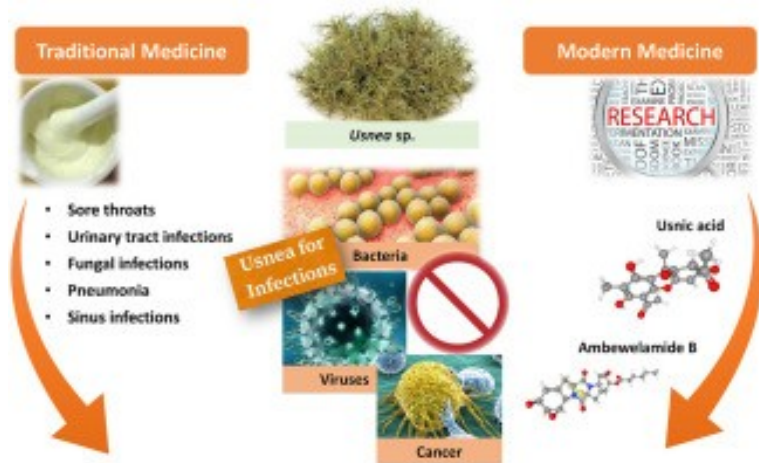


- Originates in Eurasia and has spread worldwide; common in southern and eastern Australia.
- All clovers are edible and are known as survival food – you can eat flowers, leaves, stems and roots, raw or cooked Grind the flower pods to a powder.
- Attracts bees.
- Fixes atmospheric nitrogen in the roots.
- It will not grow in potassium depleted soils or in acidic soil. Indicates soils high in magnesium, iron, sodium, copper.
- You can infuse the whole plant – flowers and leaves – as a tea for rheumatism, asthma, colds, coughs and fevers.
- Because of lack of research use as follows: occasional food use of the flowers; experimental interest in topical preparations' gentle folk-style tea use by traditional herbalists; use as a component in broader wildflower blends rather than as a stand-alone high-dose herb
- Watch allergies, pregnancy, lactation, and anti coagulants and oestrogenic drugs.

USNEA *USNEA SPP*



- Lichen that grows on trees – ID with internal “elastic” stretchy bit.
- It has antibiotic properties; tincture for internal infections (such as urinary tract etc), and make a salve for external skin infections. Can help clear lung infections, so add to cough syrup or fire cider.
- Making usnea oil may help with ageing skin and help act as a sunscreen.
- Its primary active compound, usnic acid, has demonstrated antimicrobial, anti-inflammatory, and cytotoxic properties in laboratory studies. Not studied much in humans.
- It should not be taken for long periods of time. Dose about 1mg/day – higher doses may cause liver pain.



LANTANA (*LANTANA CAMARA*)

FAMILY: *VERBENACEAE* (VERBENA)



This is native to Central and South America; brought to Australia (in 1841) as an ornamental shrub and has taken over the eastern seaboard from tropical Qld to NSW.

- Uses: Leaves are antibacterial and antifungal and anti inflammatory. Crush and apply to minor cuts or boils and athlete's foot;
- use for sore joints and insect bites, itchy skin and eczema.
- The leaves and flowers can also act as a mosquito repellent.

Patch test on the skin because some people can be sensitive or allergic to lantana.

VIOLA SPP. FAMILY: VIOLACEAE
WILD PANSY, HEARTSEASE, SWEET VIOLET



- **Parts Used:** flowers, leaves
- **Energetics:** cooling, moistening
- **Taste:** sweet, salty
- **Plant Properties:** alterative (restores the body's natural functions), demulcent (soothing and protective), inflammatory modulator, lymphagogue, mild sedative
- **Plant Uses:** congested lymph (cysts, swollen lymph nodes), food
- **Plant Preparations:** food, infused oil, poultice, salve, syrup, tea, tincture, vinegar

Do NOT Use African Violet.

CORTULA AUSTRALIS

FAMILY: *ASTERACEAE*



Carrot weed, Brass Buttons, Australian Waterbutton

Documented Medicinal Uses:

- Chewed plant or stem poultice applied as a dressing on wounds and ulcerated sores.
- In other parts of the world, the crushed whole plant has been consumed to help support recovery.
- Tea from leaves is said to be calming and sedative.
- Astringent (tightening)
- Watch for allergies

MENSTRUUMS

Menstruum is a solvent – something which draws constituents out of a plant. The best menstruum depends on what you're using the preparation for, the needs of the person using it, and the composition of the herbs being used.

- **Water** – as teas, decoctions, strong infusions, cold infusions: Minerals, mucilage, aromatic & simple bitters, tannins (astringent herbs), starches/carbohydrates (tonic and sweet herbs)
- **Vinegar** (acetums) – Minerals, some essential oils, some alkaloids, some bitters (alkaloids)
- **Glycerine** - Essential oils, alkaloids (pungent herbs), tannins, acids (sour herbs), polysaccharides, saponins, glycosides (tonic, sweet herbs)
- **Alcohol** (80-150 proof 40-75% alcohol) - Essential oils, alkaloids, glycosides, acids, bitters. As this contains some water, you can
- **Oil** - Essential oils, alkaloids and some resins, flavonoids, oils in the herb
- **Honey** – nutritive in itself; water-soluble compounds like antioxidants, tannins, enzymes, vitamins, minerals and other phytochemicals

THANK YOU

I hope you have found this to be informative and interesting, and that you will begin to look at the weeds in your lovely gardens in a different way.

Karen who will place recipes on the member wall of your website.

I have used *The Weed Forager's Handbook* (Grubb and Raser-Rowland), *Working with Weeds* (Kate Wall) and *The Wondrous World of Weeds* (Pat Collins), these being Australian authors.



WORKSHOP

Mudbrick Herb Cottage's Fire Cider If you want the original recipe, go to Rosemary Gladstar.

You will need

- 1 head of garlic, cut (or 1 Tbsp dried garlic granules)
- 1 Tbsp dried horseradish (or fresh, sliced)
- a 2.5cm piece of ginger, sliced (or dried ginger)
- 1 lemon, cut into wedges
- 1 small onion, roughly chopped
- 2 red chillies, chopped (or 1 tsp dried cayenne)
- 2 cups apple cider vinegar
- ¼ to ½ cup honey
- Optional: turmeric, thyme, rosemary, oregano

Method

1. Pack the garlic, horseradish, ginger, onion, lemon and chillies (and any herbs) into a clean jar.
2. Pour over the apple cider vinegar so everything is covered.
3. Steep in a cool, dark spot for 4 weeks.
4. Strain through muslin, stir in the honey, and bottle. Keeps in the fridge for up to a year.

Enjoy a spoonful in warm water with honey, as a zesty salad dressing, stirred into soups and stews, or mixed with oil as a marinade.