SURVIVAL PODCAST

The Survival Podcast – Medicinal Plant Identification and Use Guide

Common Plants of North America For Medicinal, Culinary and Survival Uses.

Retail Price \$9.95 - Free to Members of the TSP Support Brigade, Material May Not Be Copied or Distributed With Out Permission

Edited, Authored and Compiled by Jack Spirko

Version 010.03.01

About This Guide

This guide is designed to be a starting point that aids you in determining basic traditional plant uses and in aiding you in the identification of each of the presented species. It is certainly not designed to be a single point resource for all medicinal plant identification and usage. If you are ever in doubt about a positive identification of a plant you should consult a local expert. You should also always try new plants in very small amounts and gauge the response carefully before proceeding further. It is important to understand that there are plants that can and do kill people, some are similar in appearance to plants that are commonly used medicinally or as food.

In short use this guide but know that you alone are responsible for what you put into your body, proper identification and taking care to insure that even though something is safe that you or someone you give it to is not allergic to the substance.

I assembled this guide because I have been constantly asked about herbs, "ditch medicine" and medicinal plants by listeners. Using it is only one step toward leaning both to identify plants, how to use them and more importantly how to combine them in ways that will give you safe and desirable results. Not long ago our ancestors did not consider such medications "alternative care", rather medicinal plants were a first response to both acute and chronic health issues. Most of them had no books, few written records, no photographs and certainly no internet from which to get a base of information.

What this means is in today's day and age you have a huge advantage I two big ways. First, you have guides like this one, dozens of books, YouTube videos, websites and even the occasional TV show about plants to help you form foundational knowledge. Second, you have what we today consider "common knowledge" to use as you expand your efforts. What I mean by that is today we know what an anti oxidant is, we know that they protect cellular life and by doing so increase disease resistance, reduce the effects of aging and even have some anti cancer properties. Our ancestors really weren't even aware that oxidation occurred in the body. With the massive amount of common knowledge available today we should be making advances in the use of medicinal plants rather then abandoning them for synthesized chemicals and patented pharmaceuticals.



Elderberry

Identification - Stem with white pith, the leaves are opposite (paired), compound with 5-11 elliptical to lance shaped leaflets which are shapely toothed. White flowers in flat umbrella like clusters in June – July. Fruits are purplish black from July – Oct.

- **Fruit** Tea with peppermint used for colds. Concentrated syrup considered a cold and flu remedy.
- Flower Tea used for treating colds, reduction of fever and acting as a respiratory expectorant.

More – Elderberry is useful for many other uses, wine is made from the berries and the flowers are edible as well and often made into fritters.







American Mountain Ash

American Mountain Ash – Shrub or tree (small to up to 40') with red gummy buds. Leave are compound with 11-17 leaflets and leaflets are toothed, long pointed and narrow (3 times longer then broad). Flowers in red clusters, fruit is red/orange and appears from Aug. – March.

- **Fruit** Natives us fruit tea for scurvy and to treat worms. Very high in vitamin C.
- Inner Bark & Buds Tea was used by natives to treat colds, boils, diarrhea and tonsillitis. Also considered a blood purifier & appetite stimulant.







Black Walnut

Identification - Large tree to 120 feet with leaves that are pinnate with 12-23 leaflets. Leaflets are slightly alternate and heart shaped. Leaf stalks and leaf undersides are slightly hairy. Fruits are rounded and initially green later turning dark blue black to black. Blackened fruit will stain hands clothes, etc.

- Inner bark Tea used as a laxative and emetic (vomit inducer).
- Bark chewed to relieve tooth aches
- Fruit Husk Juice used on ringworm
- Fruit Husk Chewed for colic and poulticed for inflammation.
- Leaf Tea used as an astringent and as an insecticide/repellent

More - Both leaves and hulls are strong anti fungal and leaf extracts have been shown in labs to have strong anti viral activity and to have a protective effect on the vascular system and even inhibit some types of tumors. Studies have also shown that juglone, a growth inhibitor in the leaves has a sedative effect similar to the prescription drug valium.







Black-Eyed Susan

Black-Eyed Susan – Biennial or short-lived perennial that grows 1-3 feet high. Leaves are lance shape to oblong with bristly hairs. Flowers are yellow daisy like flowers with dark brown centers and appear June – October.

- *Roots* Tea used for worms, colds and a wash for sores and swelling. Pure root juice used for ear aches.
- *More* Black-Eyed Susan has been shown to be an immune system booster similar to Echinacea.





Dandelion

Identification – Familiar weed, flowers have hollow stalks and milky juice. Leaves are jagged cut and flowers are yellow appearing from March to Sept and sporadically through out the year.

• **Roots** – Used for liver, gallbladder, kidney and bladder ailments. Also useful as a booster for weak or impaired digestion or for constipation. Dried root is considered weaker in effect and can be used as a coffee substitute. The root is also hypoglycemic and a weak antibiotic against yeast infections. Further it stimulates the flow of bile and promotes weight loss.

• *Leaves and Flowers* – Rich in vitamin A and are considered edible as a food source. Leaf is used commercially in Germany to treat loss of appetite and feeling overly full or flatulent.

More – There are almost too many uses to list. The flowers can be used to make a wonderful wine; the roots can be used in a wine that is much like a dry sherry.

The leaves of older plants with heavy solar exposure are bitter (which is remedied by boiling and consuming as a pot herb), by picking young leaves in shaded areas they are often edible raw.

It also helps to blanch very young leaves for a few days by say covering with a plastic flower pot before harvesting for raw eating or growing them under shade netting and again harvesting young leaves.





Common Catalpa

Identification – Large ornamental tree that grows to 45 feet or more with large heart leaves that are opposite in arrangement with three leaves to each node. The leaves have a foul odor when bruised. Flowers are whitish, marked with two orange stripes and many purple spots on the inside. Seed pods are long cigar shaped pods with two paper like wings when opened.

- **Bark** Tea used as an antiseptic, laxative, sedative and worm expellant.
- Leaves poulticed on wounds and abrasions.
- Seeds Seeds are used to make a tea that is used for asthma, bronchitis and externally for wounds.
- Whole Pods Are a sedative and though to possess cardio active properties.







American Blackberry

Identification – Shrub with arching canes that root at the tips. Leaves are white on the underside, sharply double toothed. Stalks have prickly thorns Flower are white and appear from April to July. Fruits are red and turn to blue/black when ripe and are ripe in most areas from July – Sept.

- *Root* Astringent tea traditionally used for diarrhea, dysentery, stomach pain and back pain. Considered a "blood tonic" for boils.
- Leaf Tea used as a wash for sore, ulcers and boils.
- *Fruit* Thick syrup made by gently "cooking down" the juice to about 2X thickness is soothing to a sore throat and can be used with other sore throat remedies.

More – Leaf tea is approved in Germany for treatment of diarrhea and mild inflammation of the mouth and throat.







American Dogwood

Identification – Beautiful native tree often used as an ornamental. Leaves are ovate and threads appear at the veins when split apart. This tree flowers in clusters from April – May, with four showy white or pink bracts surrounding the true flowers. Fruits are scarlet, dry and inedible because they are extremely bitter.

- *Roots* Makes an astringent root bark tea which was used in the Civil War for malarial fevers and also for chronic diarrhea.
- Root Bark poulticed onto external ulcers
- *Fruit* Soaked in brandy as a bitter digestive tonic and for over acidic stomach
- *Twigs* Chewed to create a brush like end and used as a tooth brush









8 Easy to ID Invasive Herbs

Lemon Balm

Identification – Leaves are opposite and oval shaped with a round toothed appearance. When crushed the leaves have a strong lemon scent. Flowers are white and inconspicuous.

• **Leaf** – Has been poulticed for sores and insect bites. Traditional folk remedy for fever, painful menstruation, headaches, cold and insomnia. Hot water extracts have are proven antiviral and effect Newcastle disease, herpes and mumps.

More – Strong extracts (in the range of 200 to 1) are sold in Europe to treat cold sores and clinically proven effective. Used as an extract in Germany for nervous condition and sleeplessness along with digestive tract spasms. Proven to slow the breakdown of acetylcholine an messenger compound deficient in brain-cell cultures of Alzheimer's disease.

Over all contains 8 anti viral compounds (specific to herpes), 8 sedative compound and 12 anti inflammatory components. In addition Lemon Balm has antibacterial, antihistaminic, antispasmodic and antioxidant activity.





White Clover

Identification – Originally from Europe, Leaves are three part and often V-marked. Flowers are stalked and white many times with a pink twinge with round heads.

- *Leaves* Native Americans adopted leaf tea for colds, coughs, fevers and leukorrhea.
- *Flowers* In Europe the plant was traditionally used as a flower tea for rheumatism and gout.

More – Much like red clover, white clover contains the estrogenic isoflavone genistein, with a large number of properties which include cancer prevention and antioxidant properties.





Milk Thistle

Identification – An annual or biannual thistle originally from Europe. It has mottled or streaked leaves with white veins which are sharply spined. Grows up to 6 feet tall and has flowers with purple tufts often from June – September.

- *Whole Plant* Traditional tea was used to improve appetite, provide relief from indigestion and improve liver function. Also used for cirrhosis, jaundice, hepatitis and liver poisoning from chemical of drug and alcohol abuse.
- Leaves Eaten when young (with spines removed) as a pot herb.

More – Silymarin, a seed extract, dramatically improves liver regeneration in hepatitis, cirrhosis and mushroom poisoning and other liver diseases. Oral commercial preparations of the seed extracts are manufactured in Europe and now widely available in the U.S.







Wild Garlic & Domestic Garlic

Identification – Long hollow tubes, very similar to onion. Leaves extend almost to the middle of the stem. Very distinctive smell from the roots or often even from the leaves themselves. Originally from northern Europe and Asia.

True wild vs. domestic garlic are actually different plants but they are used identically for both medicinal and culinary purposes.

• **Peeled Cloves** (internally) – Eaten or made into a tea syrup or tincture and used for colds, fevers, coughs, earaches, bronchitis, shortness of breath, sinus congestion, headaches, stomachaches, high blood pressure, arteriosclerosis, diarrhea, dysentery, gout and rheumatism.

• **Peeled Cloves** (externally) – Juice applied to ring worm and acne. (can be irritating to some)

More – Medicinal use is documented back as far as 7,000 years. Experimental evidence shows the ability to lower blood pressure and serum cholesterol. It has also been clinically shown to have antibacterial, antifungal and diuretic effects. There is also clinical evidence of garlic being effective on gastrointestinal disorders, hypertension and heart ailments.





Lambs Quarters

Identification – An annual weed considered native by some and alien by others. Grows 1-3 feet tall and the stems are mealy and red-streaked. Leaves are somewhat diamond-shaped and coarsely toothed and mealy white on the underside. Flowers are greenish and inconspicuous forming clusters in Jun-Oct. in most of the U.S.

• *Leaves* – Native Americans ate leaves to treat stomach aches and prevent scurvy. Cold tea is used for diarrhea and leaf poultice is used for burns. Leaves are also editable.

• **Seeds** – Not traditionally considered medicinal but most likely contain many of the same compounds as the leaves. Can be ground into a flour for making breads and combined with other flour types for best results.

More – While not considered a true medicinal by many what is often overlooked is the massive nutritional value which reads almost like the label of a multi vitamin bottle and includes significant quantities of the following; Niacin, Folate, Iron, Magnesium and Phosphorus, Vitamin A, Vitamin C, Vitamin K, Thiamin, Riboflavin, Vitamin B6, Calcium, Potassium, copper and Manganese. Along with being a very good source of Dietary Fiber and protien.





Ginkgo

Identification – Originally from China Ginkgo is a very easy to identify tree that has been on the planet for more then 200 million years, referred to as a living fossil by botanists. Leaves are alternate and fan shaped, 2-lobed and broader then long, 1-3.5 inches wide. Males and Females are different trees, female produce oval, fleshy and foul smelling fruit with a hard coated oval seed.

• **Seeds** – Once toixic flesh is first removed then seeds are cooked and a component of Traditional Chinese Medicine for lung ailments.

• *Leaves* – Extracts provide a multitude of benefits that have made them one of the best selling supplements in the world. These extracts are highly concentrated and used for conditions such as increased circulation, improving oxygen metabolism in extremities and in the brain and are proven to be a strong antioxidant. Also improves short term memory, attention span and mood in the early stages of Alzheimer's disease.

More – One of the medicinal plants where commercially prepared extracts are required for any real effect. The crude leaf is ineffectual and the extraction process is beyond the ability of the home herbalist.





Weeping Willow

Identification – Easy to identify tree that is native to China and planted as an ornamental in the U.S. and occasionally naturalizes and begins wild reproduction.

- **Bark** Used for more then 2000 years in China to treat arthritis, jaundice and fevers. Used in Europe for tonic, antiseptic, fever reduction and astringent qualities.
- *Leaves* Use in a tea for reducing fevers, regulate urination and purify blood. Can be poulticed on insect bites and stings and has a relieving effect.

More – Like most willows Weeping Willow bark contains salicin (the main component of commercial aspirin) and is high in tannin.





Common St. Johns Wort

Identification – A pretty flowered herb originally from Europe. It grows 1-3 feet and has oblong leaves that are dotted with translucent glands. Flowers are yellow and have a bushy center formed by the stamens. There are five petals to the flowers and they have black dots on their margins. Flowers are visible June-Sept.

• Leaves and Flowers – Fresh flowers in tea, tincture or olive oil were once very popular for the treatment of external ulcers, wounds (especially with neural damage), sores, cuts and bruises. Leaf tea is a folk remedy for bladder ailments, depression, diarrhea and worms.

More – Clinically studied as a antidepressant, sedative, antiinflammatory and anti-bacterial.





8 Flowers for the Garden

Purple Coneflower (Echinacea purpurea)

Identification –.Purple Coneflower is an easy to recognize perennial that grows 2-3 feet high. The leaves are oval and coarsely toothed. The flower centers are bristled and orange in color. The flower petals are purple and on rare occasions may be white.

- *Whole Plant* Dried and used mostly as a tea to stimulate immune system activity. Poulticed and used to aid healing and control infection on external wounds.
- **Roots** The roots are used in the same manner as the tops but take 2-3 years to reach harvestable size. Harvest roots in the fall after the plants have gone to seed. Dry them in the shade or in a dehydrator.

More – Once harvested protect the plant parts from direct sunlight which quickly reduces their efficacy. Echinacea is a great plant to grow and utilize as a whole herb but for maximum efficacy as an immune booster the commercial extracts are more useful. Extensive scientific research backs up the immune boosting and antioxidant activities. Pay attention to the preparation method as alchol and water preparations have different active components.





Pot Marigold (Calendula officinalis)

Identification –.One of the easiest of all to identify plants used in gardens today but should not be confused with "tagetes marigolds" which can be toxic and are considered inedible. Most of the marigolds sold in nurseries are tagetes, so be sure you only use C. officinalis for medicinal use. Calendula is an annual or short-lived herbaceous perennial growing from 1 to 3 feet tall. Calendula has flowers of orange or yellow, with single rows of petals or "doubles". Leaves are very different from the tagetes species, they are simple ovate leaves arranged in a alternate pattern and are generally 2-4 inches in length.

> • Leaves and Flower Petals – The flowers may be used both fresh and dried but only the petals should be used. Seeds should be discarded or replanted. Marigold is a great anti inflammatory and is exceptional for treating bites and stings and providing relief from itching and sun burn. It is also highly anti-microbial, helps with wound healing and has astringent properties. Calendula is an antiseptic, and improves blood flow. As an antifungal agent, it can be used to treat athlete's foot, ringworm, and candida. A tincture applied directly to cold sores encourages healing . Calendula cream is good for acne and diaper rash. An infusion is good for digestion and relieves colitis and symptoms of menopause.

More –An infusion of the petals can be used as a rinse to lighten and brighten hair. Pot marigold makes an attractive cut flower and can be grown in the vegetable garden to help with insect control. The flowers can be used to make a very nice table wine.





Chamomile (Chamomilla recutita)

Identification –.Very easy to identify plant with small daisylike flowers that are about ³/₄ inch across. The flowers have white petals and yellow centers. The plant grows 6-24 inches in height and is slightly apple scented.

> • *Flowers and Leaves* – The flowers are famous as a tea both for calming effects and simply as an enjoyable beverage. They are also traditionally used for a variety of ailments such as colic, diarrhea, insomnia, indigestion, gout, sciatica, headaches, colds, fevers, flu, cramps and arthritis.

More – Chamomile basically means, "capable of anything" which reflects both its broad traditional use and modern proven effective components. The essential oil is proven as an antifungal, antibacterial, antispasmodic, anti-inflammatory and may help alleviate some allergic responses.

A component in the leaves called apigenin has been show to have two dozen different compounds with anti-inflammatory action.

Warning - One caution is that those who suffer from rag weed allergies may also react to chamomile.





Roses (Rosa rugosa)

Identification – Roses are extremely variable in color, size and growth habitat but is still easily identified due to its world wide fame as a beautiful flower and symbol of love and friendship. Roses all have thorns and many of the best medicinal varieties also have large "hips" we look like small fruits that are generally red or pink in color.

• *Flowers* – All rose petals are edible and they are often used in aroma therapy. The Chinese use rose petal tea to "regulate vital energy", promote blood circulation and for stomachs aches, liver pain and other gastro intestinal conditions.

• *Fruit* – The fruit of the rose also called "hips" is chiefly a source of vitamin C, in fact it has more vitamin C ounce for ounce then any of the citrus fruits. Hence it offers anti oxidant effects and the same immune system support as any source of vitamin C. They are also a natural "multi vitamin" as they contain B vitamins along with vitamins D, E and K. The anti-inflammatory properties of rose hips have recently been shown to be useful in the treatment of patients suffering from knee or hip osteoarthritis.

More – The "beauty factor" of roses should not be discounted as a form or therapy both visually as from an aroma stand point. People in "good cheer" tend to heal faster and more reliably then those who are depressed. In AD 77 the Roman writer Pliny recorded 32 disorders that responded to treatment with rose preparations. Medieval herbals contained many entries that tell of the restorative properties of rose preparations.







Nasturtium (Nasturtium gambelii)

Identification –.Nasturtiums are a relative of watercress and are easy to identify. The leaves are rounded and shield shaped with a small stalk attaching the leaf blade to the stem. The center of the leaves generally have a white or very light green spot in the center which radiates along the leaf ribs out toward the edges. The flowers are bright colored and generally have 5 main petals.

• Leaves and Flowers – Nasturtium is an effective treatment for the internal bacterial infections, most especially those affecting the skin and urinary tract, as well as the respiratory and digestive systems. It has also been used to treat fungal infections. Nasturtium has natural antibiotic effects and unlike orthodox antibiotics it does no damage to our intestinal flora (pro-biotics).

More – The oils are antibiotic, antifungal, antiviral and antibacterial; these properties can help to treat infections, colds, flu and digestive upsets that stem from an overgrowth of yeast or from parasites.

Nasturtium also boosts the immune system, which helps the body to resist infections. Further, it stimulates the appetite, promotes digestion and supports metabolism. Mildly warming, nasturtium makes an ideal chest plaster for coughs if used briefly and sparingly to avoid irritation. This herb is also a source of vitamins A, B1, B2, Niacin, B6 and C along with good supply of the mineral iron. Of course the flowers are also a great spicy accent to summer salads.





Daylily (Hemerocallis)

Identification – Daylilies are an easy to identity perennial flower that is both a back yard stable and has gone wild in much of the nation. The leaves form clumps and are sword like. The flowers face upward or out ward but never down ward. The petals are striped in the middle and curved back.

• *Roots and Young Shoots* – Have been used for over 2000 years in China to treat breast infections, turbid urine, estrogen imbalances and a variety of ailments. Also a folk cancer treatment for breast cancer but not modern studies back any efficacy in such treatment.

• *Flowers and Buds* – Used for diuretic and astringent properties in jaundice and to aid respiratory and gastrointestinal disorders.

More – Chinese studies indicate that the root extracts are antibacterial, useful against blood flukes. The extracts of the root have also proven an effective diuretic.

Warning – The roots and young leaf shoot are considered potentially toxic. Reports indicate that the toxin accumulates in the system and adversely effect the eyes causing blindness in extreme cases Using the flowers exclusively should be practiced by all but the trained master herbalist.





Lavender (Lavandula angustifolia)

Identification – Lavender is an easily identified perennial flower that is part of the mint family. IT has distinctive light blue flowers that are borne in a spiral pattern, held on spikes rising above the leaves. Flowers may be blue, violet or lilac. The individual blossoms tubular, with five lobes.

• *Flowers* – A tea of the flowers is beneficial to the nervous system and a mild anti depressant as are many plants with blue or purplish flowers. Scientific evidence suggests that aromatherapy with lavender may slow the activity of the nervous system, improve sleep quality, promote relaxation, and lift mood in people suffering from sleep disorders.

More – Lavender contains volatile oils including linalool, lavandulytl acetate, borneol, camphor, limonene, cadinene, coumarins and ursolic acid. These oils are the primary source of its carminative, antispasmodic and antidepressant qualities. A number of studies have reported that lavender essential oil may be beneficial in a variety of conditions, including insomnia, alopecia (hair loss), anxiety, stress, and postoperative pain.





California Poppy (Eschscholzia californica)

Identification –. The flower of the California poppy can be 3.4ths to 2 inches in width. The flowers have four petals which are "papery" and arranged in a fan shape. They are usually orange in color but can sometimes be yellow. The flowers come up singly from a long stalk. The plant is blue-green in color and can grow from 7-24 inches in height with the leaves that are most often between 1-2 inches in length.

• *Leaves, Stems and Flowers* – California Poppy offers mild pain relieving opiate alkaloids but unlike the optimum poppy these alkaloids are completely free of any toxic or addictive effects. The plant is very useful for insomnia, anxiety, agitation, mood disorders, depression, headache, migraine and mild neuralgia.

More – Some studies indicate that two particular alkaloids in California poppy (californine and protopine) may be responsible for the medicinal properties of herb. These alkaloids may act somewhat like benzodiazepines, a group of prescription anxiety and insomnia medications, such as the prescription medication valium. These compounds may help to relieve muscle spasms, anxiety, and insomnia. However, unlike benzodiazepines, they do not seem to have any anti seizure activity.



