

Herb book for Facilitators and small scales farmers

Mahlathini Development Foundation has introduced planting of herbs in the garden as part of the Climate smart agriculture practice for good crop management, which is under finger four of Five Finger principles. All learning groups from different villages were introduced to different kinds of herbs and were also taught how to implement herbs in their meals/how to use some of the herbs. MDF decided to have a herb handbook for farmers to refer to the uses of all the herbs they have in their gardens. The uses differ, some herbs have medicinal benefits, and some can be implemented in the kitchen.

1. Flat leaf/curly leaf parsley

Parsley is a biannual plant, it grows all throughout the year in Limpopo, even in extreme heat it thrives.

Health benefits of parsley:

- Parsley does contain a good number of flavonoids, which are dietary antioxidants (vitamin C, carotenoids and flavonoids (myricetin and apigenin).) that assist in lower the risk of significant health disorders such as diabetes, stroke, heart disease, and cancer.
- Parsley contains 0% cholesterol and fats, and it is rich in antioxidants, nutrients, minerals, and Fiber.
- This herb can help to control cholesterol levels and may reduce the risk of cancers and free radical-mediated harm. The compounds found in parsley helps prevent oxidative damage to cells and reduce the risk of chronic diseases.
- Vitamin C is also important for wound healing and may support bone health by promoting the production of collagen.
- Vitamin K is also important for bone health. Carotenoids are antioxidants that can be converted to vitamin A which, helps protect the eyes and promote healthy vision.



Uses of parley: Parsley can be used for culinary and medicinal purposes.

Parsley can be used fresh from the garden/shop, or it can be dried and used. Parsley has been used to treat conditions like high blood pressure, allergies, and inflammatory diseases. It is also an excellent

complement to dishes due to its contribution of flavour and aroma. Parsley can be dried, dried parsley may be higher in antioxidants than fresh sprigs. In fact, one study found that the dried herb had 17 times more antioxidant content than its fresh counterpart.

Culinary uses of parsley include the following.

- It can be used to garnish food.
- It can be used to make pesto's.
- You can use the dried version as an ingredient in various recipes. It can enhance the flavour of soups, stews, and tomato sauces.
- Finely chop the stems can be added to potato salad for an extra crunch.

2. Coriander



Coriander is an annual plant. In Limpopo coriander thrives in winter season, it doesn't grow well in the extreme weather of Limpopo. Coriander can be used both as a herb and a spice. Its dry fruits and seeds, which are also known as coriander, are used to flavour many foods, particularly sausages and wors.

Health benefits of Coriander:

- Coriander seeds, extract, and oils may all help lower blood sugar.
- Coriander seeds are said reduce blood sugar by promoting enzyme activity that helps remove sugar from the blood.
- Coriander offers several antioxidants, which are shown to fight inflammation in your body.
- Coriander contains antimicrobial compounds that may help fight certain infections and foodborne illnesses.
- Coriander contains antioxidants that may protect your skin from aging and sun damage. It may also help treat mild skin rashes.
- Coriander is a good source of Fiber, calcium, magnesium, manganese, and iron. It has eleven components of essential oils and six types of acids, including ascorbic acid or vitamin C, each having several beneficial properties.

- The disinfectant, detoxifying, antiseptic, antifungal, and antioxidant properties of coriander may prove to be ideal for clearing up skin disorders such as eczema, dryness, and fungal infections.

Coriander seed tea has the following benefits:

- Reduces pimples.
- Aid digestion.
- Antidiabetic
- Has antibacterial properties.
- Prevents anaemia.
- Treats conjunctivitis
- Prevents menstruation irregularities.

Culinary uses of coriander: Whole seeds can be added to baked goods, pickled vegetables, rubs, roasted vegetables, and cooked lentil dishes. They can be ground for use in pastes and doughs. Fresh leaves can be used in salads, to garnish food.

3. Fennel

Fennel is recognized by its white bulb and long green stalks. It is related to other stalk vegetables, such as celery and parsnips. The entire fennel plant is edible, including the bulb, seeds, stalk and leaves.



Health benefits of fennel:

- Fennel seeds are rich in flavonoid antioxidants, and they contain a concentrated source of micronutrients.
- The seeds are also used to make fennel essential oil, first by crushing them and then using a process called steam distillation. Due to the calcium content, fennel can help maintain bone strength and health.

- Fennel also contains magnesium, phosphorus and vitamin K, which all play a role in maintaining bone strength.
- Fennel also contains vitamin C nutrient which is an antioxidant that may help reduce the free radical damage that can lead to premature aging.
- Fennel can help lower blood pressure and inflammation due to its high potassium content and low sodium content. Potassium works against sodium, helping fight high blood pressure in the body.
- The Fiber and potassium content make fennel reduce risk of cardiovascular disease by lowering both cholesterol and blood pressure.
- Fennel tea relaxes your digestive muscles, which might be just what you need if you're struggling with regular bowel movements. Drinking some fennel tea will help cleanse your body and move toxins through your system.

Culinary uses of fennel

- The bulb can be chopped and added to salads, slaws, pasta dishes and more. It adds a crisp and crunchy texture to any dish and a sweet flavor.
- Bulbs/leaves or seeds can also be used to make tea.

4. Rosemary



Rosemary is a herb that grows on the evergreen shrub and has been used in cooking and herbal/medicine for years. This herb has a strong smell and taste, and it is also packed with antioxidants, volatile oils and other protective phytochemical compounds.

Health benefits of rosemary:

- The rosemary plant is also the source of concentrated rosemary essential oil, which is used to help relieve conditions including pain, inflammation, gastrointestinal pains, anxiety and respiratory issues.
- The supply of antioxidants and bioactive chemicals (including phenolic diterpenes, such as carnosol and caffeoyl derivatives), consuming rosemary can help fight oxidative stress and support the immune system.
- It's also known to promote healthy circulation and to defend against inflammation, which can lead to pain.

Additionally, the uplifting and energizing aroma of rosemary has been linked to improved moods, reduces drowsiness and reduced stress levels, including due to its ability to decrease release of the "stress hormone" cortisol.

Rosemary helps stimulate hair growth, by using it as a hair spray. Additionally, this herb, whether cooked with or steeped in herbal tea, it is a natural remedy for digestive issues, including loss of appetite, heart burn/acid reflux, gas, bloating and abdominal pains.

Culinary uses of rosemary

It's most often used for culinary purposes, including adding earthiness and other flavors to recipes. Additionally, it has many therapeutic and household uses, including making herbal teas, candles, perfumes, hair care products and more.

5. Thyme



Thyme is an aromatic plant that grows well in hot, sunny dry locations, known for flavoring food. One can use fresh sprigs thyme or dry it and use it dry. It has been recognized for its medicinal benefits. Essential oils can be made from thyme by steam distillation to use as a skin remedy.

Health benefits:

- Thyme tea can help to lower blood pressure, clear up respiratory infections, soothe a hacky cough, bronchial infections (causing bronchitis) and lower anxiety.
- Its high levels of vitamin C means that thyme extracts are also good for strengthening your immune system.
- Your skin can also benefit from using thyme essential oil to clear infections and treat the symptoms of acne.
- Thyme oil has been shown to have strong antibacterial activity against oral cavity, respiratory and genitourinary tracts.
- Thyme contains high levels of vitamins and minerals that are good for one's health which are vitamins A, C, E, and K, as well as minerals such as calcium, potassium, iron, and phosphorus.
- It helps reduce high blood pressure (hypertension) by drinking 2-3 cups daily, or by adding in meals instead of the salt.

Thyme oil has been shown to have powerful healing essential oil. For example, it has many health benefits due to its antimicrobial and antibacterial properties. Thymol is an antioxidant found in thyme essential oil.

Thyme tea can be made with fresh thyme or dried thyme. It is sometimes recommended to treat mouth infections, alleviate digestive upset, help cure respiratory infections, reduce inflammation, alleviate symptoms of food poisoning and help improve sleeping patterns.

Thyme tea recipe:

- Pour boiling water in a cup and add 1 teaspoon of dried thyme (if using fresh thyme leaves, you will need to triple the amount).
- Cover and leave to infuse for 10 minutes.
- Strain the leaves and add a teaspoon of honey to taste once the tea has cooled somewhat to boost the nutritional content and flavour of thyme tea.
- Drink 2-3 times a day to boost your immunity, clear a cough, or get rid of the cold faster.

6. Sweet basil

Basil is a flavourful, leafy green herb. Popular as a food seasoning, this aromatic herb is also used in teas and supplements which may provide a range of health benefits. Basil can be used as fresh in food and salads, or dried and added in food. Though dried basil is more concentrated in nutrients, you use less in recipes compared to fresh. One can make essential oil from basil. In Limpopo and EC (Matatiele) basil grows well in winter and struggles in summer due to extreme heat.

Health benefits:

- Reduce memory loss associated with stress and aging.
- Reduce stroke damage and support recovery, whether given before or right after a stroke.
- Improve fasting blood sugar, cholesterol and triglycerides.
- Reduce blood pressure in people with hypertension.
- Protect against aspirin's damage to your gut, particularly preventing ulcers.
- Increase mental alertness when inhaled as aromatherapy.
- Inhibit the growth of bacteria that cause dental decay.
- Repel insects, such as mosquitos and ticks.
- Basil leaves are high in vitamin K, which helps blood clot.
- Supports Cardiovascular health.
- Support liver health.

How to use it:

Culinary uses of sweet basil

- Basil gives zest to tomato dishes, salads, eggplant, meat seasonings, stuffing, soups, sauces and more.
- It is also used to make pesto's, which is made from crushed basil, garlic, parmesan cheese, olive oil and pine nuts, to be used in dishes.



7. Feverfew

Feverfew is a perennial herb which has light green hairy leaves and dense clusters of daisy-like flowers at the tops of its stalks. Feverfew reduces severity and associated symptoms, such as dizziness and vomiting. It also helps rheumatoid arthritis by inhibiting the formation of prostaglands. The herb is known for treating migraines, treat fever and other inflammatory conditions. Feverfew contains a variety of active compounds, such as flavonoids and volatile oils. However, its main compound of interest is parthenolide, found in the plant's leaves.



Health benefits:

People with allergies to ragweed or other related plants from the Asteraceae or Compositae plant families — such as daisies, marigolds, and chrysanthemums — should avoid it as well. Pregnant women should avoid taking feverfew, as it may cause early contractions. What's more, research to ensure it's safe for breastfeeding women is insufficient.

Both the leaves and flowers can be harvested and used medicinally. The ideal time to harvest is around the start of flowering generally in early to mid-summer though the leaves can be harvested any time throughout the season. Cut foliage and flowers cleanly with gardening shears or a sharp knife, leaving the bottom two-thirds of the plant intact.

Use the dried leaves and flowers to make a tea to prevent headaches. The tea can also be cooled and applied to the skin as an insect repellent or used on pets as a natural flea rinse provided, of course, that you're not allergic or sensitive to it.

- Relieves chronic joint pain.
- Helps to increase appetite.
- Alleviates stress and anxiety.
- Relieves respiratory problems.
- Aids in maintaining healthy heart.
- Relieves headache and migraines.
- Helps reduce fever and related pain.
- Provides relief from asthma and coughing.

- Helps treat skin conditions and irritation.

8. Dill



Dill is a plant that has slender stems with alternating soft leaves and brown, flat, oval seeds. The leaves have a sweet, grassy flavour and seeds are more aromatic.

Nutrient value: Dill contains the following nutrients.

- Vitamin C - is vital for your immune system and helps with bone formation, wound healing, and metabolism.
- Manganese - essential mineral that supports normal functioning of your brain, nervous system, and metabolism of sugar and fat.
- Vitamin A- helps with maintaining vision and supporting a healthy immune system.
- Folate and Iron

Dill is rich in antioxidants. Antioxidants help protect cells against damage caused by unstable molecules. The first antioxidants are the **flavonoids**, it is associated with a reduced risk of heart disease, stroke, and some forms of cancer. It is also said that they may also play an important role in brain health. **Terpenoids** found in essential oils made of dill herb may protect against liver, heart, kidney, and brain diseases. **Tannins**, which is responsible for bitterness in many plant foods, tannins have been shown to have potent antioxidant properties, as well as antimicrobial effects.

Culinary uses: Dill is commonly used to elevate the flavour of various dishes. It's often paired with salmon, potatoes, and yogurt-based sauces. The tea can also be cooled and applied to the skin as an insect repellent or used on pets as a natural flea rinse provided, of course, that you're not allergic or sensitive to it. Dill tea can help to improve digestion and relieve stomach cramps. It is also a diuretic, which means it can help to reduce water retention. Dill tea is also thought to have detoxifying properties and be beneficial for the respiratory system. The tea can be made from seeds or leaves and boiling water, adding honey.

9. Lemon grass

Lemon grass tastes and smells like lemon but is sweeter and milder. It has been used to treat lots of health issues and conditions. Dried or fresh, lemongrass boasts has plenty of beneficial medicinal properties such as anti-inflammatory, analgesic, antidepressant, antiseptic, antipyretic, antibacterial, astringent, antifungal, carminative, febrifuge, diuretic, galactagogue, sedative, insecticidal, anti-cancer, and anti-aging properties.

Health benefits:

- Lemongrass possesses potent pain-relieving and anti-inflammatory properties that help to treat rheumatism, arthritis, gout, osteoarthritis, and other kinds of the joint pain.
- Lemongrass is an excellent source of antioxidants that help to decrease the risk of cancer by eliminating free radicals in the body.
- Lemongrass is renowned for its incredible antifungal and antibacterial properties that help the body to effectively fight bacteria and viruses and thus deal with cold and flu symptoms faster.
- Lemongrass is also effective in treating the muscle pain and headaches related to colds or flu. It's also helpful in breaking down phlegm and mucus build-up, thus resolving breathing issues.
- Drinking lemongrass tea at least once a day helps detoxify and cleanse the whole body. Thanks to its diuretic properties, lemongrass helps to flush out harmful toxins, eliminate uric acid, and lower the bad cholesterol levels by increasing the quantity and frequency of urination.
- Lemongrass tea can aid in purifying the pancreas, bladder, and liver, as well as in elevating blood circulation that's vital for overall health.
- The anti-atherosclerosis and anti-cholesterol abilities of lemongrass help to decrease the cholesterol absorption from the intestine.
- Lemongrass can help to treat numerous digestive health issues, including constipation, indigestion, heartburn, bloating, diarrhea, flatulence, vomiting, stomach spasms, cramps, and in some cases nausea.
- Citronella found in lemongrass has a calming effect on the body and mind and thus helps you get a better-quality sleep.
- Lemongrass is great for people with type-2 diabetes. Lemongrass tea helps to maintain optimal levels of insulin and enhance the glucose tolerance in the body.



Nutrition benefits

- Fiber
- Carbohydrate
- Vitamins A, B & C

- Calcium
- Magnesium
- Potassium
- Manganese
- Iron

10. Comfrey



Comfrey is a shrub that grows in parts of Europe, Asia, and North America. It can grow up to 5 feet tall. It produces clusters of purple, blue, and white flowers, and it's famous for its long, slender leaves and black-skinned roots. While comfrey is well-known for its health benefits, it also poses some risks. It contains compounds that can harm your liver. It may also be carcinogenic. It may contain small amounts of toxic pyrrolizidine alkaloids.

Health benefits:

- Comfrey has been used in alternative medicine as a possibly effective aid in treating back pain, osteoarthritis, or tenderness and swelling caused by a sprain injury. It is often sold as an herbal supplement.
- Poultices of comfrey leaves and roots can help cure and supply pain relief for bruises, mild burns, and traumas that cause swelling.
- Comfrey also has traditional uses for alleviating symptoms of gout and osteoarthritis, a kind of acute inflammatory arthritis.
- Comfrey is not recommended for internal use because of the liver damage caused by its pyrrolizidine alkaloids.

11. Rocket

Rocket's delicate texture and punchy, peppery taste make it ideal to be mixed with other leafy greens in a bold-flavoured salad.



Health benefits

- Rocket is an excellent source of vitamin A. Studies have found this vitamin and flavonoid compounds in leafy green veggies help protect you from skin, lung and mouth cancers. (Flavonoids also play an anti-allergic, anti-cancer, antioxidant, anti-inflammatory and anti-viral role).
- It contains vitamin C, a powerful, natural antioxidant that helps boost immunity against disease and destroys harmful, pro-inflammatory free radicals from the body.
- It contains important minerals like calcium, magnesium, potassium, sulphur, iron, phosphorus and selenium. These minerals play their parts in keeping the blood pressure low: potassium, calcium, and magnesium. Iron is an important mineral that develops red blood cells that carry oxygen to each cell of your body.
- Rocket is definitely rich in vitamin K – containing 109mg of the vitamin per 100 grams. Vitamin K regulates blood clotting so that your injuries heal when you get hurt. It also helps regulate blood pressure for a healthier heart and ensures calcium is carried to your bones.
- In addition, wild rocket leaves also contain copper which stimulates the creation of white blood cells. White blood cells are your number one defense against contagious diseases caused by viruses and foreign agents that attack your body.
- Rocket boost eyesight. The herb has two antioxidants, lutein and zeaxanthin, are found in this veggie. These antioxidants protect the macula of your eye from degeneration. They also guard against damage caused by UV light and blue light.

Culinary uses of Rockets

- Rocket can be incorporated into a range of other dishes or enjoyed on its own with a splash of extra-virgin olive oil, salt, and squeeze of lemon.
- Rocket goes very well when tossed through pasta dishes or sprinkled on top of pizza before serving or be added in burgers.

12. Oregano



Oregano has a strong flavour, warmth to dishes, and a hint of subtle sweetness. It can be found fresh, dried, or as an oil, and all have significant health benefits.

Culinary Use: Oregano is most commonly used as a dried herb in cooking. It pairs well with tomato-based dishes, pizzas, pasta sauces, roasted vegetables, and grilled meats.

Other uses: Apart from culinary and medicinal uses, oregano is sometimes used as a fragrant herb in potpourri, soaps, and perfumes. Its essential oil is also used in aromatherapy.

Health benefits:

- Oregano is rich in antioxidants, which are compounds that help fight damage from harmful free radicals in the body.
- The essential oil of oregano has anti-inflammatory properties, which reduce inflammation and the risk of heart disease.
- Oregano oil is sometimes used as a natural remedy for respiratory issues, digestive problems, and as a topical treatment for skin conditions.
- The benefits of oregano leaves can be helpful in preventing cancer. Thymol, carvacrol and some other anti-carcinogenic properties are found in oregano, they can prevent cancer cells from growing and reduce the risk of cancer.
- nutrients are found in oregano, such as vitamin-A, vitamin-C and vitamin-E. All these three vitamins are considered to be effective antioxidants. These vitamins can help in increasing the immunity of the body.
- One can boil oregano leaves in a glass of water and consume that water. Oregano tea can also be consumed in the problem of cold and sore throat.
- Essential oil of oregano reduces the number of gut-damaging bacteria such as E. coli and can help improve the immune system of the gut. For this, one must add one or two drops of oregano oil to a cup of peppermint or lemon tea to consume.
- A monoterpic phenol compound named carvacrol is found in Oregano. This compound has anti-inflammatory properties, that can reduce joint swelling caused by osteoarthritis, leaves can be used to make tea. For this, boil some of its leaves in a cup of water every morning and consume that water.

How to use oregano for tea:

- Oregano tea can be made, which can provide the benefits of oregano leaves. For this, boil oregano leaves (fresh or dry) in a cup of water. After boiling well, filter the water and consume it.
- A few leaves of oregano can also be added to ginger or masala tea.
- To take advantage of the benefits of oregano, it can be used as a spice in chicken, vegetable, pizza, pasta and other dishes.
- Oregano leaves can also be consumed by adding them to the soup. Its leaves will give a different flavour to the soup.
- Oregano can be used in all the three forms of fresh, dry and oil.

13. Chamomile

Chamomile is among the most popular of all herbs and for good reason. It can be used for a wide variety of physical and emotional health issues from treating stomach complaints and skin infection to



easing stress and anxiety. It is most popularly made into a soothing tea, or its blossoms are used to produce a popular essential oil with various excellent health benefits.

Health benefits:

- The antioxidants found in chamomile help your health in a variety of significant ways. They can help improve immune function, reduce inflammation and pain, improve emotional wellbeing and stave off premature aging.
- It can be used as tea, tincture or used as an essential oil, to help combat stress and anxiety and promote relaxation.
- Chamomile can help relax the digestive system and is used to treat numerous digestive complaints. These include indigestion, diarrhea, gas and bloating, vomiting and nausea.
- Chamomile can help ease the breathing difficulties that you experience when you are congested. When you drink it in tea form, it can help eliminate those familiar symptoms of the cold or influenza while inhaling its vapors can have a similarly beneficial effect.
- Chamomile has the following nutrients, calcium, iron, magnesium, manganese, niacin, phosphorus, potassium, riboflavin, vitamin A, and vitamin C.

14. Curry bush

Curry is known for its smells pleasantly of curry and spice meals like rice and meat dishes. But also, as a medicinal herb it has been known for a long time, so that it is still used today in natural medicine.



The Curry plant is an evergreen subshrub, which can reach growth height up to 70 cm (28 inches) and usually grows very bushy. The plant is perennial and prefers sunny locations. Also, the plant has relatively narrow roots.

Culinary uses: Basically, you should not mix the Curry plant with the spice curry. Curry powder is a spice mixture (including coriander, pepper, cardamom, nutmeg, cumin). Curry plant suits many dishes.

For preparation either the leaves can be finely chopped or whole branches can be used. In dishes that are cooked with twigs, the branches of the curry bush should be removed before consumption.

Curry herb should be harvested the leaves and branches before flowering, because after flowering, the leaves lose a lot of aroma.

Health benefits:

The plant has wound-healing, anti-inflammatory, fungicidal, antibacterial, expectorant, antispasmodic and relaxing features. Typical applications of curry herb plant are:

- wound cleansing
- Relief of colds (cough, bronchitis)
- Disorders of the lymphatic vessels
- mild depression
- nervous restlessness
- Skin problems (itching, impurities, eczema)
- Bruises

Preparing curry plant tea:

- Curry flowers are used rather than the leaves.
- For the preparation of 250 ml Curry plant tea about 1 to 2 teaspoons of Curry plant blossoms are needed, which are poured over with boiling hot water. The tea must then steep for about 7 minutes. The tea should be drunk twice a day.

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