

Posse+Plus, Wood County Texas

The Moringa Oleifera Tree

The Miracle Tree

“Moringa, Angel in Plant Form”

(Renate Ingruder’s film)

Wonder Tree

Tree of Life



“Good health is not everything, but without it everything is nothing.”

- Hundreds of studies gives evidence of health-giving properties
- 300+ applications treatable
 - High blood pressure
 - Osteoporosis
 - Diabetes
 - Increases birth weight
 - Helps with milk production
 - Adaptogenic
 - General malnourishment

Nutrient profile of Moringa (example)

Vit A, B1, B2, B3, B6, B7, C, D, E, K

- 17 x more calcium than milk
- 15 x more potassium than bananas
- 7 x more Vit C than oranges
- 7 x more Vit B1 & B2 than yeast
- 4 x more Vit A than carrots
- 2 x more protein than soy

46 Antioxidants, Zeatin, Chlorophyll

- 1.5 x more amino acids than eggs
- All 20 amino acids, including 8 essentials (complete protein)
- High proportions of unsaturated fatty acids (Omega 3,6 &9)
- Contains an exceptional # of minerals

Moringa's Zeatin

- Gives plant its exceptional fast growth
- Outstanding capacity to regenerate (which is passed on to humans)
- “Nature’s hormone of the Fountain of Youth” Roitsch
- Effective in treating skin damage – Denmark University
- Slows cell aging & activates body’s ability to keep skin youthful
- Helps maintain female hormone balance for young & later in life
- Ensures that all vitamins, minerals, trace elements and amino acids are taken up by the body
- Strong antioxidant and helps cells regenerate

Zeatin (continued)

- “While zeatin can be found in many plants, it is normally present only in less than one microgram per gram. The Moringa leaf, by contrast, contains over a hundred times as much per gram and is thus a real “fountain of youth”. Thanks to these extensive yet balanced nutrients, Moringa can provide energy, vitality and fortitude. It is like a power pack for youthful energy, appeal and emotional equilibrium. This brings us to another of Moringa’s merits, for which the tree also has another name. It is sometimes called the “Green Diamond” because of its phenomenal nutrient content is unparalleled in the world.”

Zeatin (continued)

- Moringa is not only a vitamin bomb containing 90 different and valuable vital substances for humans; it also boosts bioavailability many times over thanks to the zeatin content.



Manganese, Chromium and Boron

- Manganese important for bones
- Chromium important in metabolism and stressful situations
- Boron vital to production of amino acid serine
 - Important for calcium, magnesium and phosphorus balance
 - Is used medically to treat osteoporosis
 - Reduces oxidation caused by stress
 - Inhibits cell division without differentiation (e.g. cancer cells)
 - Is the trace element that is most commonly found in the brain
 - Element form boron is toxic, and therefore only plants with high boron content are applicable

Salvestrols in Moringa

- Protective agents found in some plants as defense against disease
- It is these agents, claim the scientists, that cause cancer tumors to regress
- Historically, original strains of fruit and vegetables defended themselves against enemies of all kinds
- Modern fruit and vegetables are grown on sterile plantations using artificial fertilizers and contain almost no salvestrols (early harvesting).
- Moringa Oleifera leaves are rich in these salvestrols and for this reason alone are to be recommended

Salvestrols

*Salvestrols are the name given to certain special secondary phytochemicals that form part of the natural defense mechanisms of plants. They always form when the plant is attacked by pathogens. If say, a fruit is attacked by a fungus, the plant forms a salvestrol specific to this pathogen. It is found in the rind of the fruit and particularly in the area close to the attack. We need exactly the same protective substances in our own nutrition as do plants in order that our own organism can defend itself and in particular against the threat of cancer. If modern-day plants are sprayed with fungus, however, the plants cease to generate their own protective agent. It follows that today's plants contain almost no salvestrols. It is interesting that the number of cancer cases has increased almost directly parallel to the introduction of modern industrial agricultural methods."

Chlorophyll

- A kilogram of (dried) Moringa leaves contains almost 7 g of Chlorophyll (another world record)
- Chlorophyll is vital for the health of our blood
- No other plant in the world is currently known by science to contain more chlorophyll than Moringa
- Along with trace element iron, chlorophyll is regarded as the most important substance for the production of blood. (Dr. Young)
- Chlorophyll brings more oxygen into the blood, and this optimizes metabolic process, boosts immune, inhibits inflammation, helps deal with acute infections and inhibits tumors.
- Regarded as “the green medicine”

Antioxidants

- “Free radicals” are considered to be unstable oxygen compounds that are lacking an electron.
- They replace the missing electrons by simply ripping them out of other molecules – proteins, hormones, genetic material and other substances important to the body.
- The substances that are robbed of the electron now find themselves struggling to restore the balance and begin to attack other tissue in the body.
- The result is a vicious circle that is harmful for 3 reasons: 1) body lacks substances it requires, 2) its fabric is damaged, 3) chemical by-products are harmful and burdensome to the body. This is a significant factor in aging.
- Antioxidants are substances that help the organism to suppress this process and/or counteract it by making electrons available to free radicals.

ORAC (Oxygen Radical Absorbency Capacity)

- Recommended to ingest between 5000 – 7000 ORAC units daily
- Individual plants are specified per 100 grams (3.5 oz) ORAC value
 - Example: 100 grams raspberries provide up to 2000-4000 ORAC units
 - Goji berries contain 25,000 ORAC units (one of the highest in the world)

Moringa has the highest ORAC value that has ever been measured, **100,900 ORAC units**. Of course, this is dependent on region, soil, cultivation, etc. – Canary Islands has the highest value

For vegans and raw food eaters in particular it is worth knowing that the moringa leaf is also a valuable source of (complete) protein.

Moringa a Superfood?

- Moringa has 90 different vital substances, vitamins, antioxidants, minerals, trace elements, all amino acids, large amounts of plant protein, healthy fatty acids, chlorophyll and numerous other associated plant substances, all perfectly matched in a natural plant compound – fully bioavailable from a single plant and their effectiveness boosted to the maximum with zeatin.
- Moringa can be called “nature’s concentrated superfood”
- It’s good for those doing sports, females with hormone issues, children concentrate better, stamina improves, general feeling of being happier.
- Tangible effects of youthfulness of skin, brain, performance and well-being.
- Moringa: a total, all-in-one food supplement that contains all the nutrients that the human being needs, from the fetus in the womb through to old age.

How is Moringa used?

- Leaves and fruit as food (fresh or dried) (or even fermented)
- Leaves as a spice, In bee-keeping and in medicine
- Seeds as food, for oil and for water purification
- Bark for medicine and for rope and paper production
- Roots for food, spice and medicine (horseradish substitute)
- Whole plant for animal feed or as biomass for alternative energy
- Waste products for soil improvement, organic fertilizer and animal feed

Moringa Blooms



Moringa's other uses

- Extracts of Moringa Oleifera are used mainly for their balancing effects on the nervous and hormone systems and for strengthening the body's defenses.
- Leaves can be used in salads, soups, casseroles, quiches, omelets, meatloaf, stroganoff, cheese spreads, pizza, tea (hot or cold), or powdered as a spice.
- As a tree it has the potential to solve the most pressing problems of the so-called "Third World" and also heals illness, to purify water for drinking and even to produce diesel.
- Because Moringa grows so fast, it can be used in agriculture as a fertilizer and help to grow larger, tastier and healthier plants.
- Moringa oil (from the seed) has been used by Swiss watch makers, the oil does not go rancid.

Moringa

- 13 known species of Moringa. Moringa Oleifera most nutritious
- Grows in dry, sandy soil, and forms storage roots that go deep
- Likes temps between 77* and 113*F
- Thrives in regions getting 20 plus inches of rain
- Temps below 64* moringa ceases growth
- Dislikes being waterlogged and prolonged frost
- First year grows between 15-24 feet
- Can live 25 years
- Can blossom after 3 months, produces fruit its first year

Moringa Seeds and Pods are...

- From 3-sided long pods
- Edible like green beans, asparagus
- Known as Behen or Ben nuts/Oil produced known as Behen/Ben oil
- Known for producing high quality oil, used in the past for Swiss watches
- Able to produce oil that doesn't go rancid
- Bunched 25+ seeds in a pod
- Used for clarifying/purifying/flocculating water for drinking, etc.
- Used medicinally to treat tape worms, etc.



Moringa Seed Pods

Moringa tree bark and roots

- The bark and roots of the Moringa tree are primarily used for medicinal purposes for home remedies; such as appetite stimulant, and used clinically in the treatment of serious illnesses.
- Apart from medicinal uses the water-soluble bark mucus of the horseradish tree is used to treat toothache in many countries and also as a disinfectant fabric finish.
- The resin of the tree is also used medicinally for headache, earache tooth decay and digestive problems.
- In South Asian countries the young green twigs of wild Moringa species are used as vegetables, normally blanched and then added to a spicy dip sauce or to soups.

Moringa Agricultural uses...

- Fixes nitrogen from the air and thus improves the soil (replacing modern and costly nitrogen fertilizers) on a long term basis.
- Any kind of fertilizers used on Moringa tends to reduce the high nutrient (vital) substance content, which surprises scientists greatly.
- Moringa is a valuable source of nutrition in itself but it also assists other plants. The natural plant growth hormones that ensures Moringa growth, known as cytokines can also be used to stimulate growth in other plants. It is obtained by pressing young Moringa shoots and the resultant liquid diluted with water, can be sprayed on other plants to boost growth.
- An extract of Moringa leaves in 80% ethanol can be used as a plant spray, making plants more resistant to insect invasions and diseases.

Other Moringa advantages:

- Increases yields in crop plants
- Food crops had better flavor and nutritional profile
- Increased biomass
- Milk production in cows increased if moringa was mixed in with feed
- Moringa can be processed into bioethanol. No other (known) crop plant in the world produces more biomass. High energy output.
- Used as animal feed
- Midwives in Africa make Moringa tea to boost milk production.
- A blessing in old age, because of less bioavailability of B vitamins, cobalamin, Vit. C, etc. Moringa can fill many nutritional gaps.
- Moringa planted around medical clinics for use by patients.

Growing Moringa

- We've been growing Moringa for 7 years.
- We grow between 75-100 trees annually
- Start seeds middle of March to middle of April
- Soak seeds 24 hours
- Then place between damp paper towels and put in Ziplock bag
- Seeds will sprout in 7 – 10 days. 90-95% germination rate
- Take sprouted seed and plant in tall foam cups with potting soil
- Plant in ground beginning of May. (Soil temp should be 65*(+))
- Plant in sunny location, Moringa doesn't like heavy clay soil.
- Moringa does NOT like WET feet!
- Moringa is drought tolerant once mature.

Moringa

- Moringa can grow 15-25 feet in one growing season. May- Sept
- Moringa can begin blooming in 3 months. Bees & Hummingbirds Love it!
- All parts of the Moringa are edible and useable
- Moringa likes regular/weekly watering
- Moringa enjoys humidity, sunshine and heat and sandy soil.
- Moringa does not want to be fertilized
- Moringa can be propagated by seed, limb rooting, etc.
- Moringa can be cut to 3-4 feet tall to make harvesting easier (This method will NOT produce flowers and/or seeds.)
- Moringa makes a great Farmer's Market product. Harvesting from short trees can be done every 3 weeks.

Moringa in the fall.

- Moringa is considered an annual in this growing zone. We are about as far North as you can grow this wonderful tree without a greenhouse.
- However, I have a large berm on the southside of my home. Trees planted on the South side of this berm have continued to grow back from the roots for the last 3 years. These trees make large, more abundant seed pods. When these trees begin to grow from the roots they are multi-trunked.
- We usually cut off each tree to about 18 inches when the weatherman says it will be our first frost. Moringa stop growing when temps are below 65°F. They will maintain until it gets down to 45°F.

Drying Moringa

- We usually hang the trees upside down under our covered porch/or cut the limbs from the trees and lay on the bed in the guest room and turn on the ceiling fan. Usually this only takes about 24 hours for the leaves to be completely dry.
- Dried leaves can be packed into canning jars then vacuumed packed for long term storage.
- If space is an issue, powder the leaves and pack in jars.

Enjoy
your
Moringa!

