



# Moringa oleifera, Mlonge (Kiswahili):

1. Fight Malnutrition,  
help AIDS patients!

[www.anamed.net](http://www.anamed.net)

[www.treesforlife.org](http://www.treesforlife.org)

# **Moringa contains everything a malnourished person needs!**

**The leaves  
contain**

- **Vitamins**
- **Protein**
- **Minerals**



# Moringa leaves contain



Tiny leaves.

**Enormous benefits.**

=

**7 times** the vitamin C of Oranges



**4 times** the vitamin A of Carrots



**4 times** the Calcium of Milk



**3 times** the Potassium of Bananas



**2 times** the Protein of Yogurt

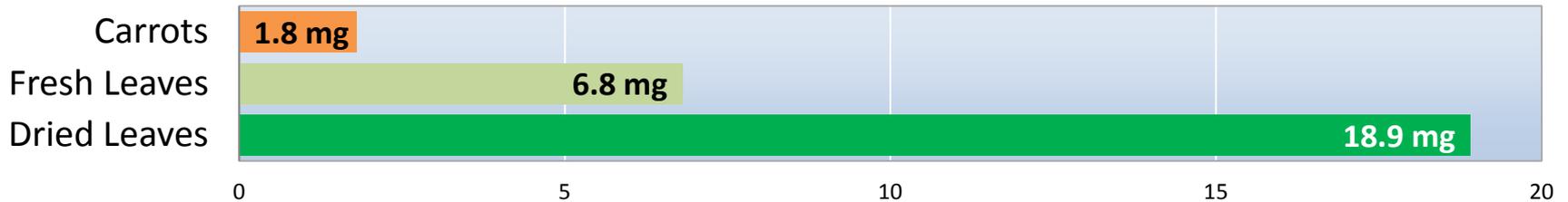


Gram-for-gram comparison of nutritional data

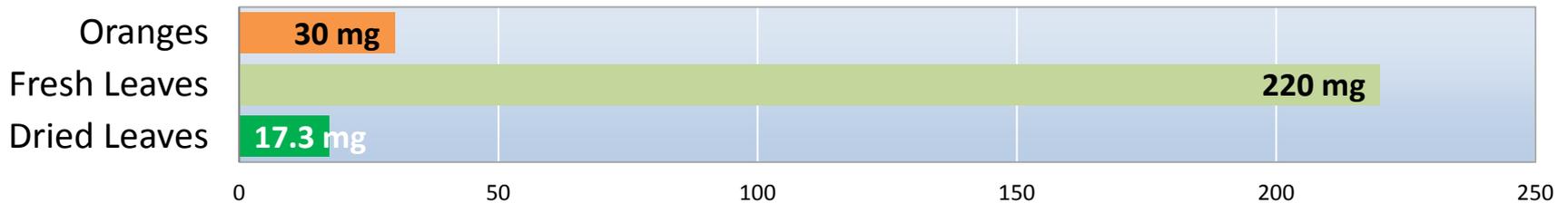
Nutritional analysis has shown that Moringa leaves are extremely nutritious. In fact, they contain larger amounts of several important nutrients than the common foods often associated with these nutrients. These include vitamin C, which fights a host of illnesses including colds and flu; vitamin A, which acts as a shield against eye disease, skin disease, heart ailments, diarrhea, and many other diseases; Calcium, which builds strong bones and teeth and helps prevent osteoporosis; Potassium, which is essential for the functioning of the brain and nerves, and Proteins, the basic building blocks of all our body cells.

# 100 grams contain

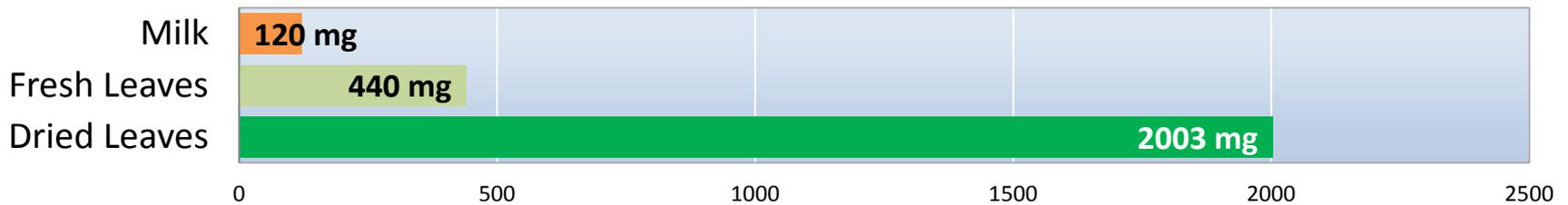
## Vitamin A



## Vitamin C



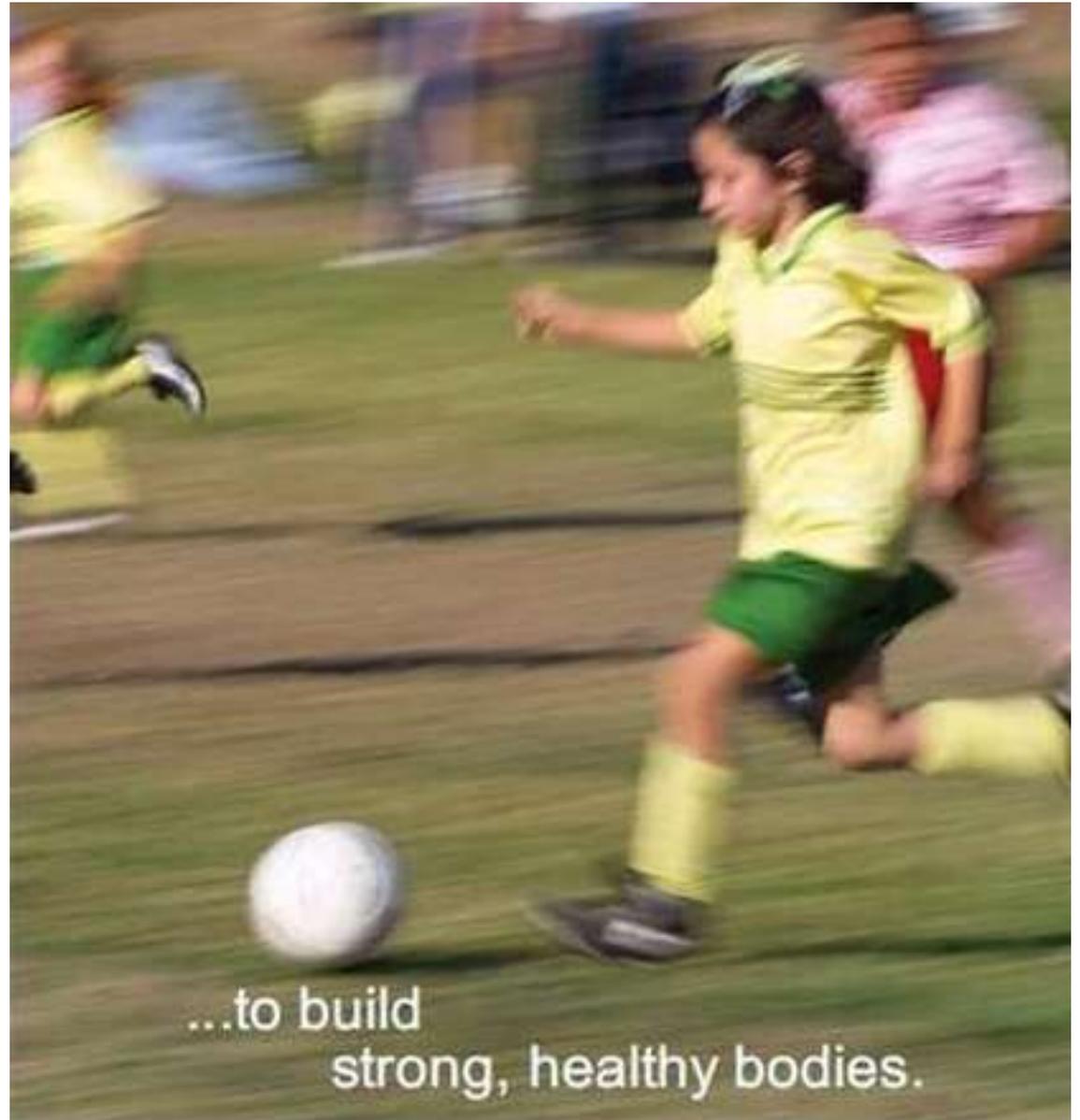
## Calcium



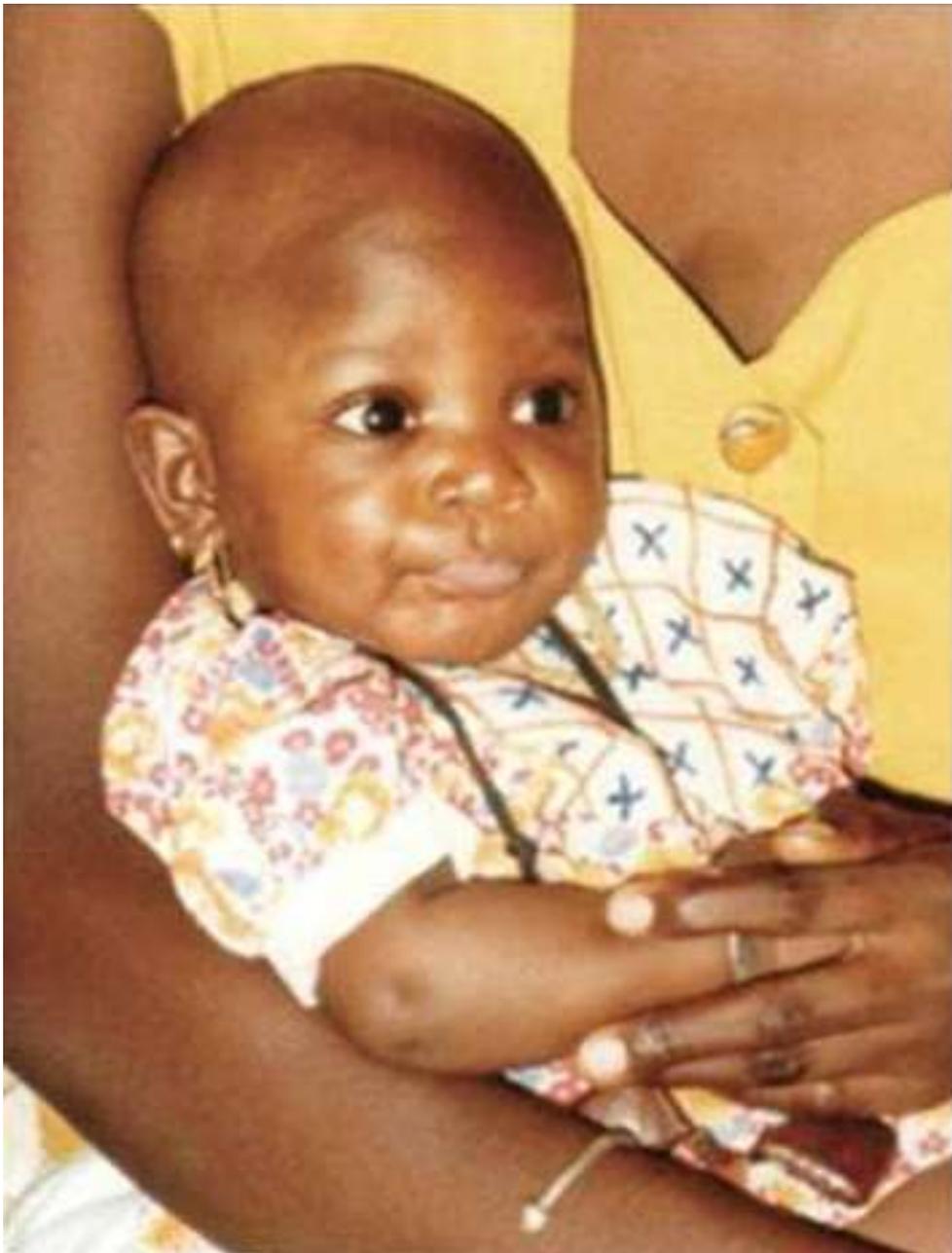
The graphs show the content of vitamin A, vitamin C and calcium in fresh Moringa leaves and dried leaves, compared to common foods. Except for vitamin C, very little nutritional value is lost in the drying process. This is important because dried leaves can be stored for use much longer than fresh leaves, so that a supply is available year-round.

Rare for a  
plant source,

Moringa leaves  
contain all the  
essential  
amino acids...



Another important point is that Moringa leaves contain all of the essential amino acids, which are the building blocks of proteins. It is very rare for a vegetable to contain all of these amino acids. And Moringa contains these amino acids in a good proportion, so that they are very useful to our bodies. These leaves could be a great boon to people who do not get protein from meat.

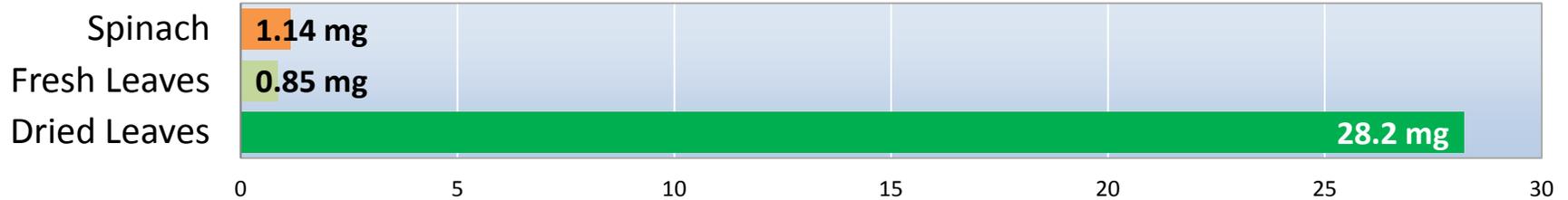


Moringa even contains arginine and histidine – two amino acids especially important for infants

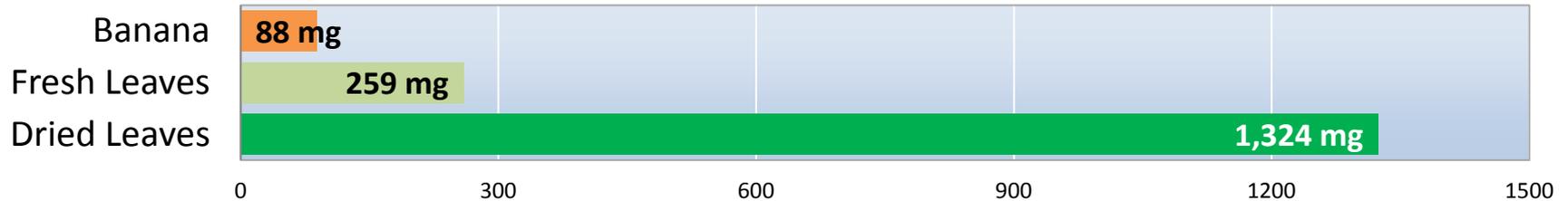
It is noteworthy that Moringa contains arginine and histidine, which are especially important for infants who are unable to make enough protein for their growth requirements. Experts tell us that 30% of children in sub-Saharan Africa are protein deficient. Moringa could be an extremely valuable food source.

# 100 grams contain

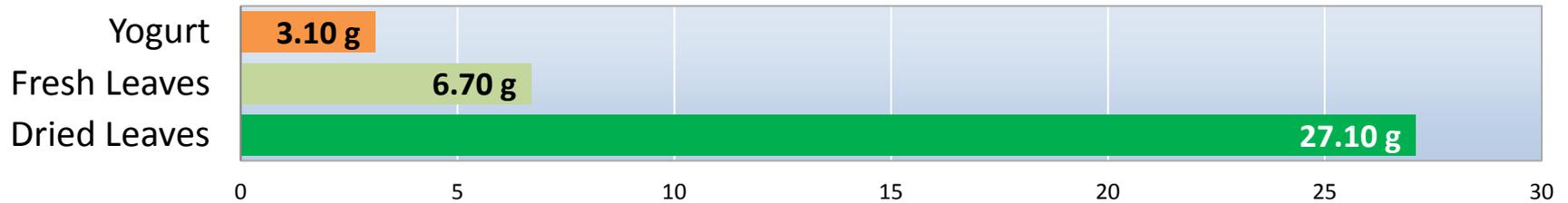
## Iron



## Potassium



## Protein



Here are the comparisons for iron, potassium, and protein in fresh Moringa leaves and dried leaves. Once again, we see how drying the leaves condenses the nutrients, so that a large dose of nutrition can be gained from a small spoonful of dried leaf powder.

# Malnutrition



# Moringa



We are all well familiar with the problems of malnutrition in our world, and how much suffering and death result. Here are the countries with the highest rates of malnutrition. The amazing thing about Moringa is that ... it grows in almost exactly the same places. These are the countries where Moringa grows – exactly where it is needed the most.

# Common Names for Moringa

(See more at: [treesforlife.org/moringa/names](http://treesforlife.org/moringa/names))

**English:** Drumstick tree, (Horse)radish tree, Mother's Best Friend, West Indian ben

**Spanish:** Ben, Árbol del ben, Morango, Moringa

**French:** Bèn ailé, Benzolive, Moringa

## **Africa**

Benin: Patima, Ewé ilé  
Burkina Faso: Argentiga  
Cameroon: Paizlava, Djhiré  
Chad: Kag n'dongue  
Ethiopia: Aleko, Haleko  
Ghana: Yevu-ti, Zingerindende  
Kenya: Mronge  
Malawi: Cham'mwanba  
Mali: Névrédé  
Niger: Zôgla gandi  
Nigeria: Ewe ile, Bagaruwar maka  
Senegal: Neverday, Sap-Sap  
Somalia: Dangap  
Sudan: Ruwag  
Tanzania: Mlonge  
Togo: Baganlua, Yovovoti  
Zimbabwe: Mupulanga

## **Asia**

Bangladesh: Sajina  
Burma: Dandalonbin  
Cambodia: Ben ailé  
India: Sahjan, Murunga, Moonga  
Indonesia: Kalor  
Pakistan: Suhanjna  
Philippines: Mulangai  
Sri Lanka: Murunga  
Taiwan: La Mu  
Thailand: Marum  
Vietnam: Chùm Ngây

## **South and Central America, Caribbean**

Brazil: Cedro  
Colombia: Angela  
Costa Rica: Marango  
Cuba: Palo Jeringa

Dominican Republic: Palo de aceiti  
El Salvador: Teberinto  
French Guiana: Saijhan  
Guadeloupe: Moloko  
Guatemala: Perlas  
Haiti: Benzolive  
Honduras: Maranga calalu  
Nicaragua: Marango  
Panama: Jacinto  
Puerto Rico: Resada  
Suriname: Kelor  
Trinidad: Saijan

## **Oceania**

Fiji: Sajina  
Guam: Katdes  
Palau: Malungkai

While native to the Indian sub-continent, Moringa has spread throughout the tropical and sub-tropical regions of the world. Here are some of the many common names for Moringa.

# Moringa leaf powder

How do we  
make moringa  
leaf powder??

1. Pick the leaves.
2. Wash them.
3. Dry them **in the shade.**  
Otherwise  
vitamin C will  
be destroyed!



# How to dry the leaves

- You can only dry **finely chopped fresh leaves in the dry season!**
- In the rainy season, the leaves will wilt and get mouldy!
- **Finely chop** the **fresh** leaves (without stems) and spread them, e.g. on banana leaves at the floor, so that they dry within three days and do **not** wilt. If they wilt, they are spoiled! (Then the medicinal substances have already started to decay.)



# Moringa leaf powder

4. When they are completely dry, pound them.

5. Rub them through a sieve.





# Moringa leaf powder

6. Store in labeled jars or bags and **keep in a dry, dark place.**



# Use Moringa leaf powder

**especially with ...**

- **undernourished children**
- **pregnant women**
- **breast feeding mothers**
- **AIDS Patients**

# And how?

**Mix per person  
one heaped  
teaspoonful  
three times a  
day into a plate  
of food.**

**Simple!**



# Side effects

**All are positive! For example:**

- **Diarrhoea ceases.**
- **Fungal infections on the skin disappear.**
- **Diabetes is stabilised.**
- **Anaemia improves.**
- **Tummy problems are helped.**



# Test in Senegal

Results:

**Children** maintained or increased weight and improved health.

**Pregnant women** recovered from anemia and had babies with higher birth weights.

**Breast-feeding women** increased milk production.

This test found the following effects to be common among subjects taking Moringa leaf powder: Children maintained or increased their weight and improved overall health. Pregnant women recovered from anemia and had babies with higher birth weights and breast-feeding women increased their production of milk. This test is now being duplicated and expanded in Ghana. Further tests are needed in other countries as well.



## Also use with HIV/AIDS Patients

Used together with *Artemisia annua anamed* tea, Moringa can be just as effective as anti-retroviral (ARV) drugs, but without the usual side-effects. This was discovered in 2004 by anamed Musoma, Tanzania.

In East Africa you may get *Artemisia annua anamed* from anamed Musoma: Philip Mateja [anamedbndp@gmail.com](mailto:anamedbndp@gmail.com)

# Artemisia and Moringa strengthen the immune system of AIDS patients

Dr. (med.) Feleshi (Tanzania) said:

“One of my female patients came from Mwanza. I asked a doctor, who is a good friend of mine, to take her CD4 count. It was 34. Then I gave her Artemisia (annua anamed) tea and Moringa (leaf powder). I treated her for three months – her syphilis and typhoid fever too [with plant medicine]. Then I sent her back to hospital to take the CD4 count again. Her CD4 count had climbed to 280! She felt good and all people were surprised.”

Source: DIE EINFÜHRUNG DER HEILPFLANZE ARTEMISIA ANNUA L. IN TANSANIA: FOLGEN, HERAUSFORDERUNGEN UND LOKALE INNOVATIONSPROZESSE, Thesis, Caroline Meier zu Biesen, Berlin 2011, p. 243

# Artemisia and Moringa strengthen the immune system of AIDS patients

A 41 years old female AIDS patient in Musoma (Tanzania) said:

“After drinking Artemisia tea, I gained strength. Indeed, I still had diarrhea, but I was no longer so weak. I also got appetite again and was able to walk... The changes occurred fast. The sores which I had in my mouth and on my skin started to heal... They have disappeared up to now. It took three months until I had gained full strength... I remember that I did not trust this tea initially, yet the Kaza Roho group encouraged me to drink this tea although it is very bitter...”

Source: DIE EINFÜHRUNG DER HEILPFLANZE ARTEMISIA ANNUA L. IN TANSANIA: FOLGEN, HERAUSFORDERUNGEN UND LOKALE INNOVATIONSPROZESSE, Thesis, Caroline Meier zu Biesen, Berlin 2011, p. 234



# Recipe for HIV/AIDS Patients

Take **three tablespoons full of *Moringa oleifera leaf powder*** every day with the meals. In addition: In the first week of each month drink daily 1 litre of ***Artemisia annua anamed*** (A3) tea made with four heaped teaspoons of dry leaves, the rest of the month drink daily one cup of A3 tea made with one heaped teaspoon of leaves.

# Sources of more information

- 1. "**Moringa News**" [www.moringanews.org/](http://www.moringanews.org/) This web-site is a source of a lot of background reading material on moringa, and it is constantly being revised and added to. The aim of the international network MoringaNews is that *Moringa* products benefit the poorest people by contributing to their food security and health.
- 2. "**Growing and processing moringa leaves**" (2010) An excellent, new and well-illustrated book published by Moringa News and the Moringa Association of Ghana. [www.moringanews.org/moringa\\_en.html](http://www.moringanews.org/moringa_en.html)
- 3. **Trees for Life international** has produced excellent materials on moringa, and an informative powerpoint presentation which may be downloaded free of charge. [www.treesforlife.org/our-work/our-initiatives/moringa](http://www.treesforlife.org/our-work/our-initiatives/moringa). They have produced a publication, which can be also downloaded free of charge, "Some call it a miracle. Could it also be good science?" [www.treesforlife.org/documents/moringa/English\\_moringa\\_book\\_view.pdf](http://www.treesforlife.org/documents/moringa/English_moringa_book_view.pdf)
- 4. "**The Miracle Tree: The Multiple Attributes of Moringa**", (2001), Edited by Lowell Fuglie.
- 5. "**Moringa: Nature's medicine cabinet**" by Sanford Holst, 2000, Sierra Sunrise Books. Available from ECHO. This book includes a long description of folk remedies of moringa.
- 6. **ECHO, Educational Concerns for Hunger Organization.** Echo's vision is to bring glory to God and a blessing to mankind by using science and technology to help the poor. Echo supplies ideas, information, training and seeds to those working in agriculture and development overseas.
- ECHO, 17391 Durrance Rd, N. Ft. Myers, FL 33917-2239, USA. Email: [echo@echonet.org](mailto:echo@echonet.org) Tel: +1 239-543-3246 Web-site: [www.echonet.org](http://www.echonet.org)
- 7. **World Agroforestry Centre database** <http://www.worldagroforestry.org/>. Click on Information resources, and then Agroforestry Databases.
- 8. "**Moringa oleifera: A Review of the Medical Evidence for Its Nutritional, Therapeutic, and Prophylactic Properties. Part 1**" by Fahey, J W, Trees for Life Journal 2005, 1:5. Can be read at [www.tfljournal.org/article.php/20051201124931586](http://www.tfljournal.org/article.php/20051201124931586)
- 9. "**Quenching the thirst of millions in the world - application of processed *Moringa oleifera* seeds in drinking water treatment**" by Suleyman Aremu Muyibi. Powerpoint presentation on moringa as a water clarifier. [www.moringanews.org/documents/suleyman.ppt](http://www.moringanews.org/documents/suleyman.ppt)
- 10. **James A. Duke. 1983. Handbook of Energy Crops.** Unpublished but on the internet. [www.hort.purdue.edu/newcrop/duke\\_energy/Moringa\\_oleifera.html](http://www.hort.purdue.edu/newcrop/duke_energy/Moringa_oleifera.html)
- **Please, look at Part 2 of this series**