

“The hardest thing to see is what is in front of your  
eyes.”

- Goethe



These leaves could  
save millions of lives.

# The Moringa Tree

*Moringa oleifera*







# Varieties

Thirteen Moringa species are known:

*M. oleifera*

*M. arborea*

*M. borziana*

*M. concanensis*

*M. drouhardii*

*M. hildebrandtii*

*M. longituba*

*M. ovalifolia*

*M. peregrina*

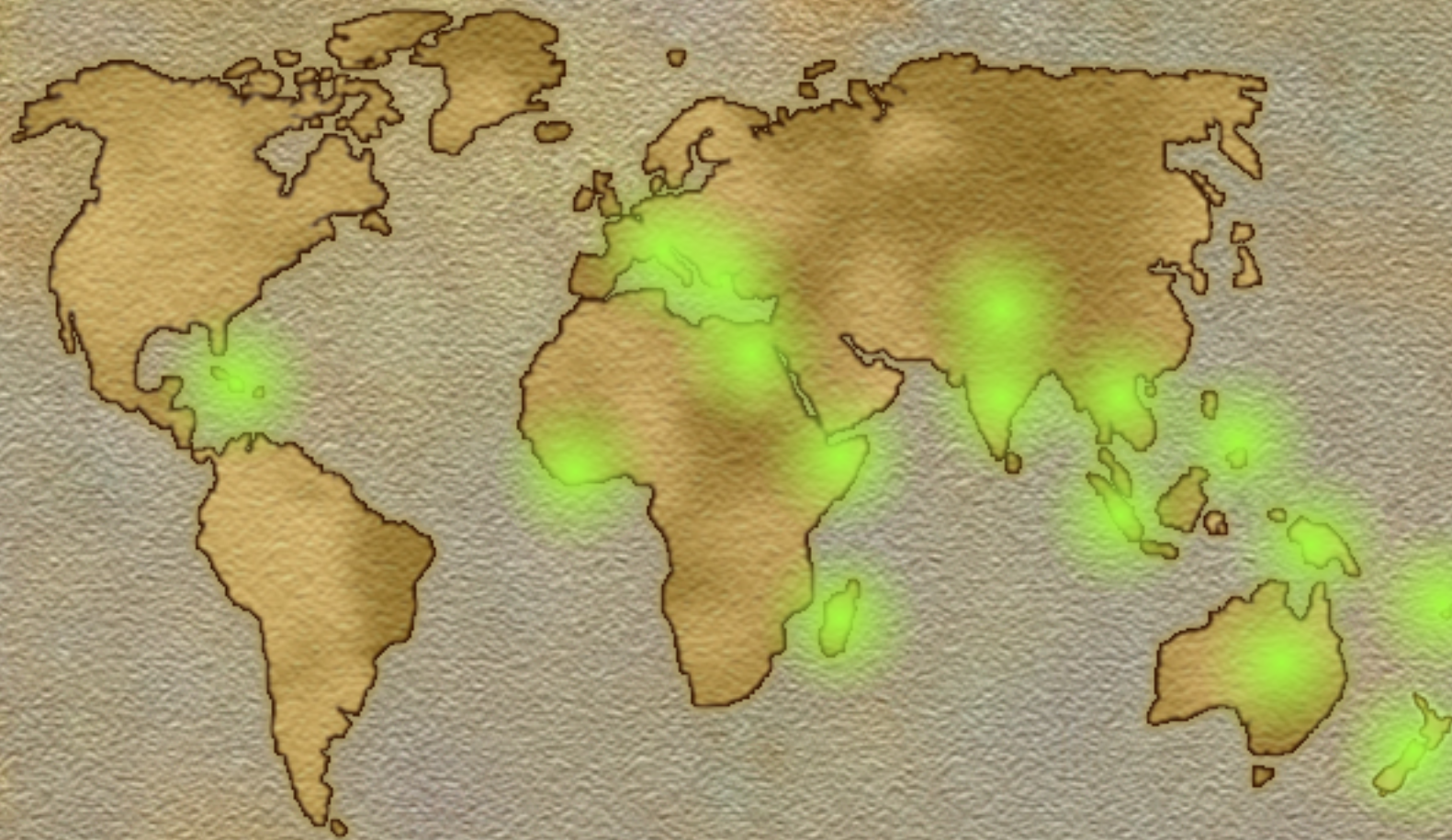
*M. pygmaea*

*M. rivaie*

*M. ruspoliana*

*M. stenopetala*

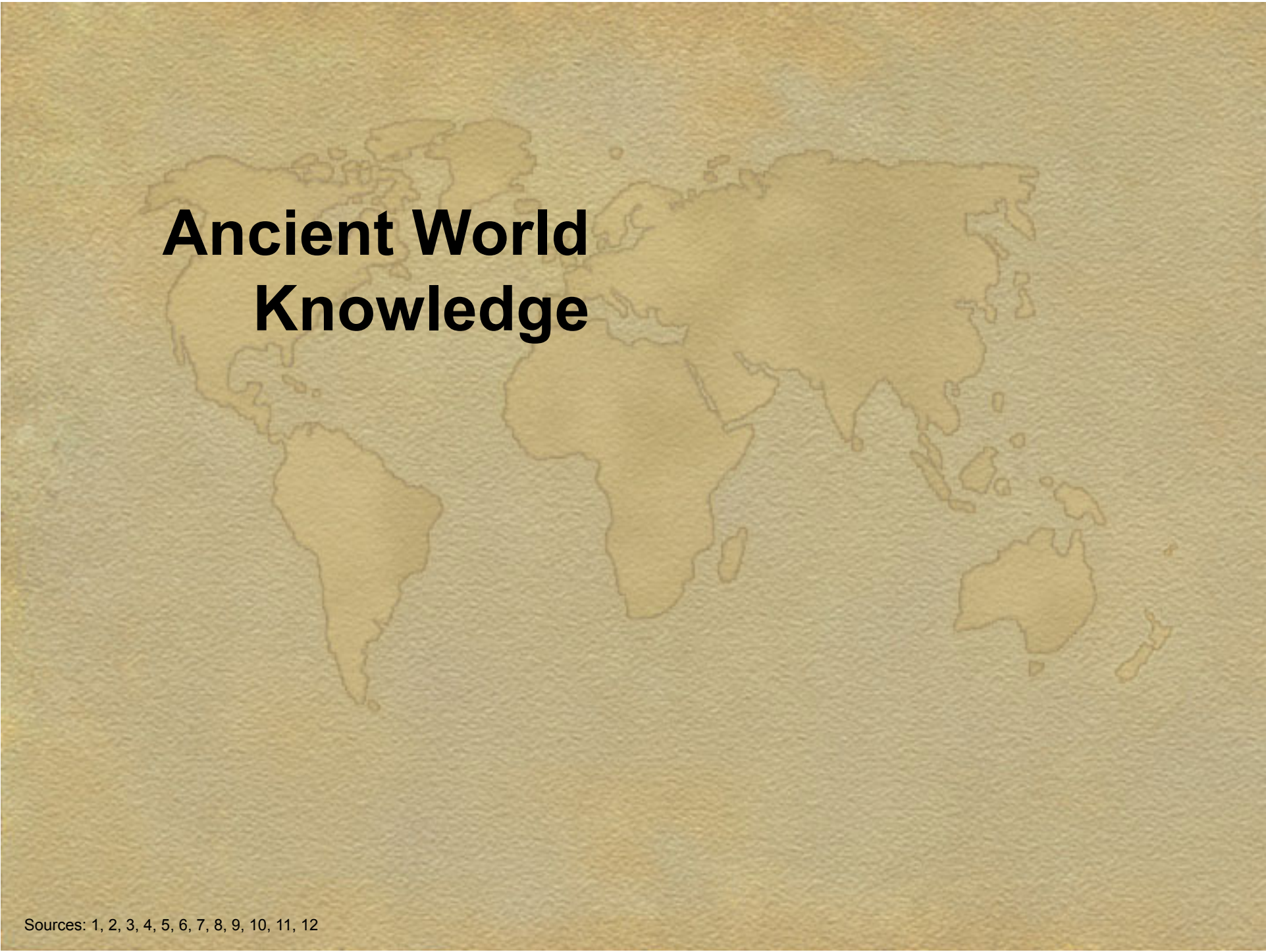




## **Moringa Knowledge in the Ancient World**



# Ancient World Knowledge



# Scientific Knowledge





# Nutritional Value



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

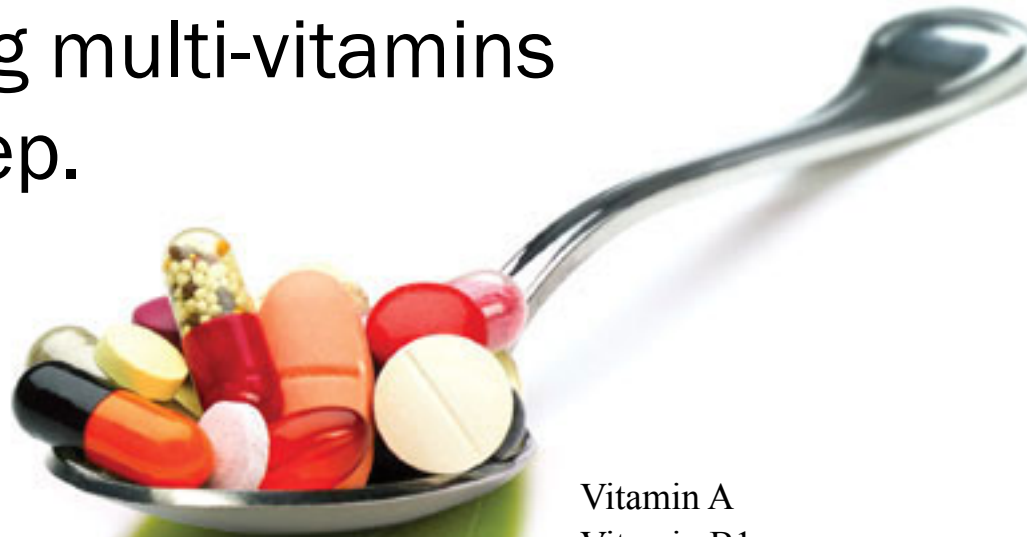


2 times the Protein of Yogurt





It's like growing multi-vitamins  
at your doorstep.



Vitamin A

Vitamin B1

Vitamin B2

Vitamin B3

Vitamin C

Calcium

Chromium

Copper

Iron

Magnesium

Manganese

Phosphorus

Potassium

Protein

Zinc

Rare for a  
plant source,

Moringa leaves  
contain all  
the essential  
amino acids...

...to build  
strong, healthy bodies.

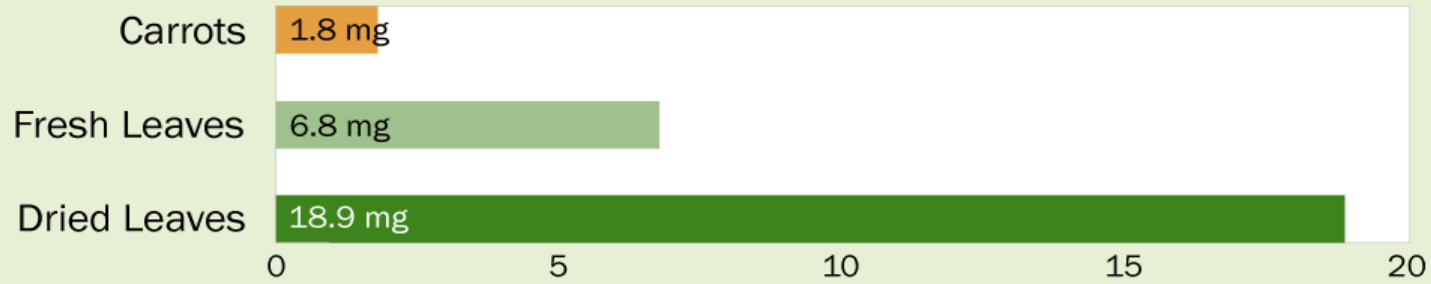




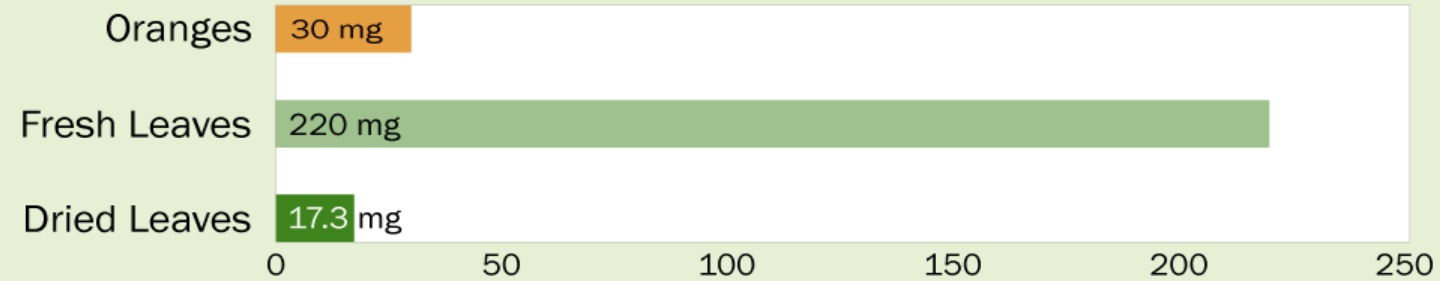


Moringa even contains *argenine* and *histidine*—two amino acids especially important for infants.

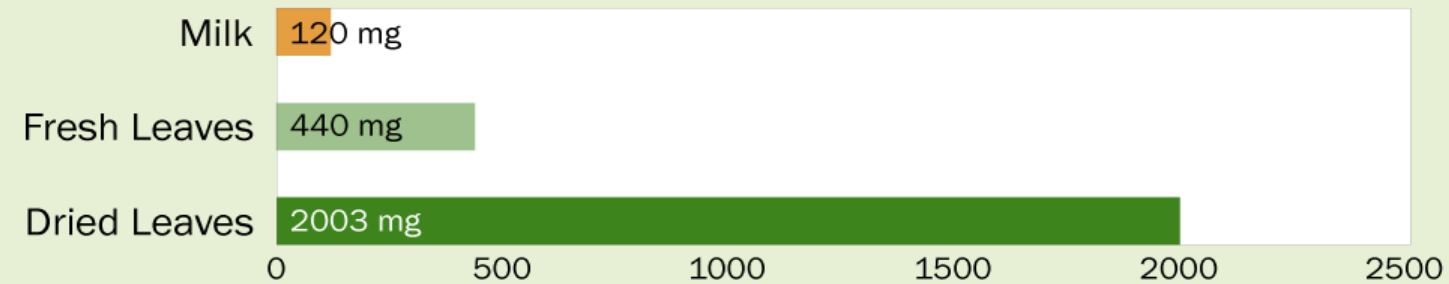
### Vitamin A



### Vitamin C

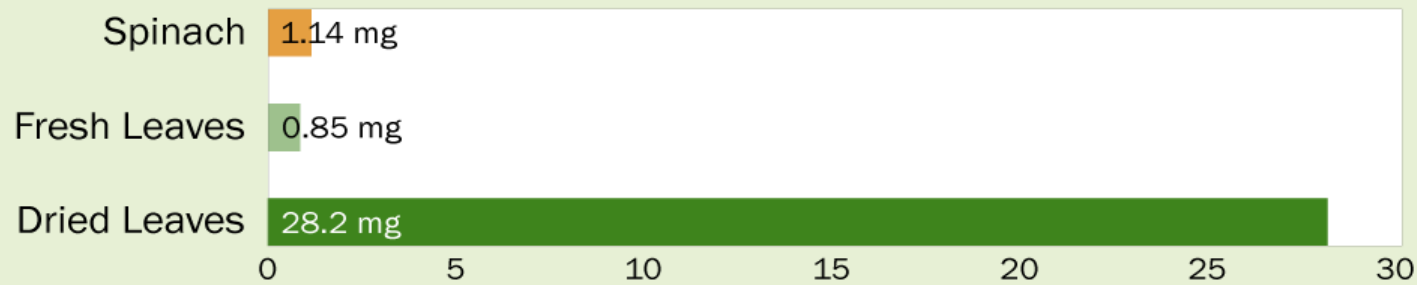


### Calcium



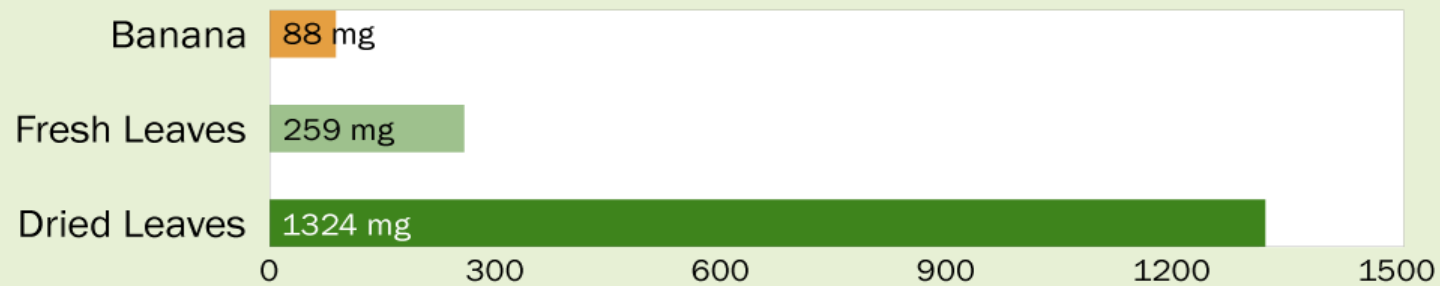


## Iron

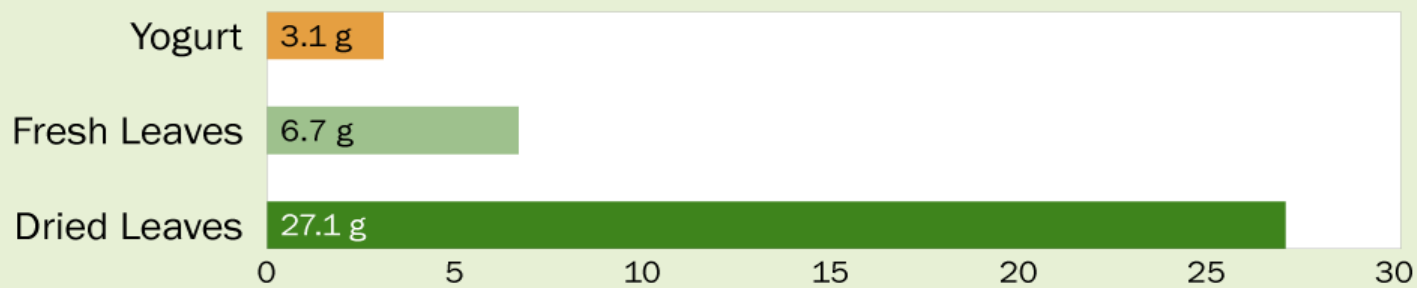


**Note:** Iron from plants, including spinach and Moringa, is generally difficult for the body to absorb.

## Potassium



## Protein



Guatemala: Kolor  
Trinidad: Saijan

# Common Names for Moringa

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

Trinidad: Marangra





Leaves:  
Nutrition  
Medicine



Trees:  
Alley Cropping  
Erosion Control



Flowers:  
Medicine



Pods:  
Nutrition  
Medicine



# Consider the Possibilities



Roots:  
Medicine



Seeds:  
Water Purification  
Medicine  
Oil



Gum:  
Medicine



Bark:  
Medicine





Moringa's Potential



- Human Health
- Livestock Fodder
- Plant Growth Enhancer
- Biogas

# Human Health



# Test in Senegal

Conducted by:

- **Mr. Lowell Fuglie,**  
Church World Service in  
Dakar
- **AGADA**  
(Alternative Action for  
African Development)







# Test in Senegal

## Results:

- **Children** maintained or increased weight and improved health.
- **Pregnant women** recovered from anemia and had babies with higher birth weights.

# Research in Nicaragua

**Nikolaus Foidl**

**Leonardo Mayorga**





**Dr. Nadir Reyes Sánchez**



# Intensive Cultivation

























# Livestock Fodder



Increases daily  
weight gain  
up to **32%**

Increases milk  
production  
**43% to 65%**



# Plant Growth Enhancer

# Plant Growth Spray

- Extract juice from green matter
- Dilute with 36 parts water
- Spray 25ml on each plant













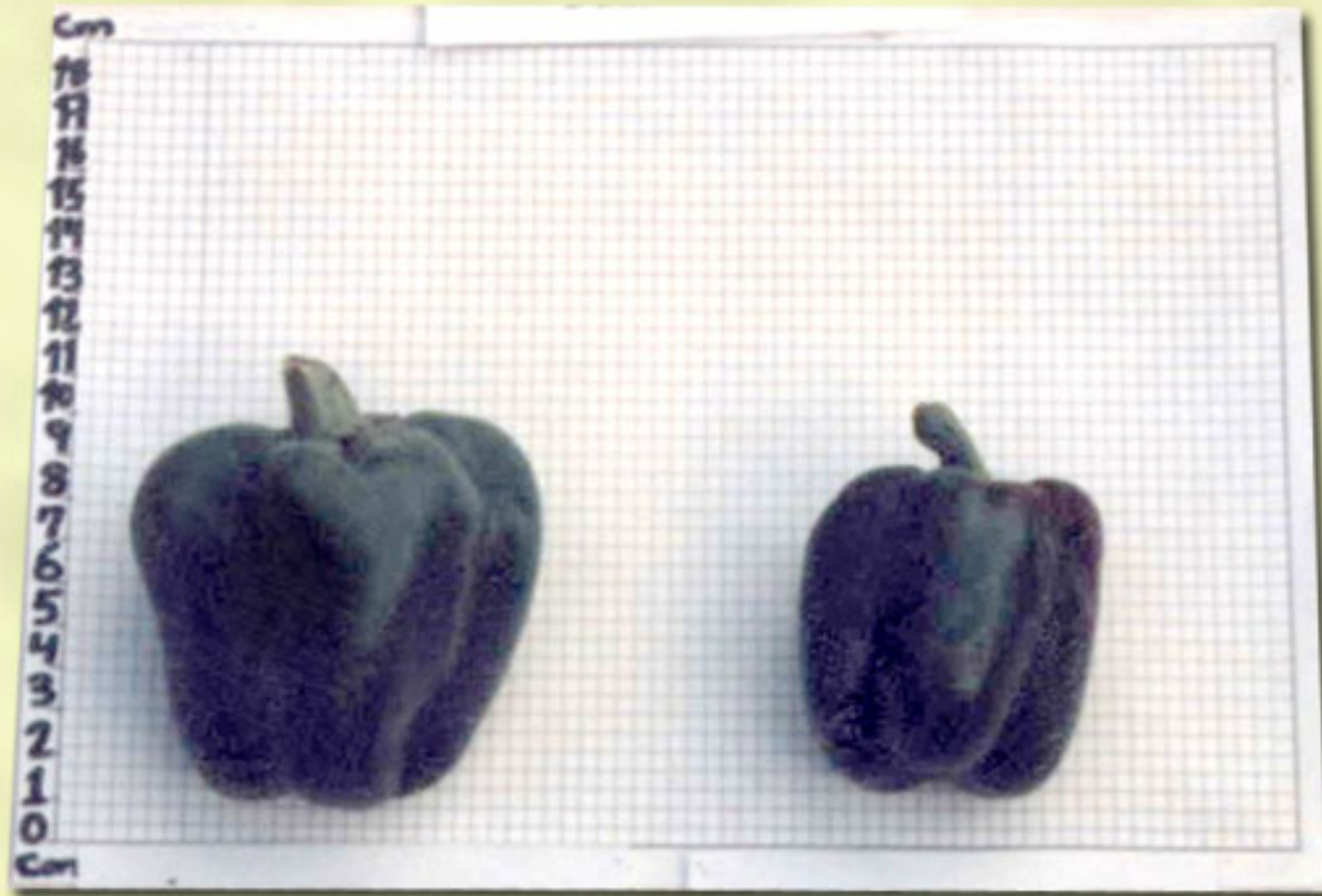




# Effects of Spray

- Accelerates growth of young plants
- Plants are firmer, more resistant to pests and disease
- Longer life-span
- Heavier roots, stems and leaves
- Produce more fruit
- Larger fruit
- Increase in yield 20-35%

# Bell Pepper



Spray

Control

# Sugar Cane Roots



Spray



Control



# Sorghum



Spray

Control

# Turnips



Freeze Dried  
Spray

Control

Spray



Biogas





# Need for Studies

- Human Health
- Livestock Fodder
- Plant Growth Enhancer
- Biogas

# How to Help

- **Share this information with key decision-makers in your country.**
- **Promote field studies and clinical studies in your country.**
- **Share your findings with the rest of the world.**



# Trees for Life Journal

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a forum on beneficial trees and plants

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