



MORINGA

(Moringa oleifera)



Global
Facilitation
Unit
for Underutilized
Species

enabling deployment of underutilized species



What is Moringa and where does it come from?

Moringa oleifera is the best known of the thirteen species of the genus **Moringaceae**. Though apparently native only to restricted areas in the southern foothills of the Himalayas, ***Moringa oleifera*** is present in all the countries of the tropics. This fast growing tree is grown for human food, medicine, dye, fodder and water clarification.

The Moringa oleifera is known by several names in different countries, but it is popularly called the 'drumstick tree' for its pods resembling drumsticks and the 'horseradish tree' for the flavour of its roots.

PROPERTIES

The moringa is planted for its leaves, fruits, and roots for a variety of food and medicinal purposes. It has been described as one of the world's most nutritious crops. The leaves have more beta-carotene than carrots, more protein than peas, more vitamin C than oranges, more calcium than milk, more iron than spinach, and as much potassium as bananas.

❖ Food and beverages

The young fruits can be cooked in a number of different ways. An excellent oil is derived from the seeds, which is used for cooking and cosmetics. Immature seeds can be used in recipes similar to green peas. The leaves are extensively used as a vegetable in many parts of the world, and the root can be made into a condiment similar to horseradish. Fresh or dried flowers are used for making teas.

❖ Health

Moringa is used successfully in combating malnourishment in children and for its capacity to boost the immune system, it can be used to complement modern medicines in chronically ill people including those suffering from AIDS and HIV related illnesses. It is also used in traditional medicine for the treatment of various illnesses including recovery from liver damage. It is currently being examined as a bio-enhancer of drugs and nutrients because of its production of compounds with antibiotic activity.

❖ Other Uses

There is ongoing research that focuses on the use of moringa oleifera seeds and/or seedcake in water clarification.



MORINGA



GROWING

Moringa tolerates a wide range of environmental conditions. It will tolerate extremely high temperatures in the shade and can survive a light frost. The drought-tolerant tree grows well in areas that receive annual rainfall amounts ranging between 250 and 1500 mm. It prefers a well-drained sandy loam or loam soil, but tolerates clay. Moringa is planted either by direct seeding, transplanting, or using hard stem cuttings.

HARVESTING

Leaves can be harvested after plants grow 1.5 to 2 meters, which usually takes 3 to 6 months. They are harvested by snapping leaf stems from branches or by cutting the entire branches 20 to 40 cm above the ground. Older leaves need to be stripped from their tough and wiry stems. These leaves are more suited to making dried leaf powder, since stems can be removed during the sifting process. For fresh vegetables the leaves must be harvested early in the morning and sold the same day. Flowers and pods are produced during the second year of growth. The pods are harvested when young, tender and green. The pulp and immature seeds of older pods remain edible until shortly before the ripening process begins.

MORINGA



Contribution to rural and social development

Virtually every part of the tree is beneficial in some way and both rural and urban people depend on it for their livelihood. Depending on the purpose and quantity, moringa is grown in nurseries, as a community project, or on a small scale at the family level. It can function as windbreaks, for land erosion control, live fences, as an ornamental, or intercropped to provide semi-shade to species requiring less direct sunlight. One theme surrounding the cultivation and use of moringa is the risk that the species may alter the land and its living systems. However, according to a recent study, a crucial transition must take place whereby destructive farming practices must be replaced by new and improved cultivation methods which raise moringa without destroying natural systems on which agriculture ultimately depends. In fact, the effective development and management of moringa can indeed contribute to sustainable growth and poverty reduction in developing countries. But for this to take place, a balance must be found between the short-term needs of the people for their social and economic development and the protection of the natural resource base.



The exhibits on show are just few of many commercial products made from Moringa:

Moringa powder

Moringa beverage

SOME PRODUCERS / RETAILERS / DISTRIBUTORS

❖ Zija - www.drinklifein.com

❖ Natco - www.natco-online.com

Photographs by: Mélanie Broin and Armelle de Saint Sauveur (www.moringanews.org),
and AVRDC - The World Vegetable Center (www.avrdc.org)



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For further information, contact:

GFU for Underutilized Species

Via dei Tre Denari, 472/a

00057 Maccarese, Rome, Italy

TEL: +39-06-6118-292/302

e-mail: underutilized-species@cgiar.org

website: www.underutilized-species.org