Moringa
(Moringa oleifera)

Characteristics:
Moringa is a fast-growing tree and tolerates a wide range of environmental conditions. It grows best between 25 to 35°C, but will tolerate up to 48°C in the shade and can survive a light frost. Moringa prefers a well-drained sandy loam or loam soil with full sunlight. Avoid clay soils that become sticky when wet and very hard when dry. Moringa will not survive under prolonged flooding and poor drainage.

Cultivation instructions:
Dig a planting pit about 50 cm deep and wide. Compost or manure at the rate of 5 kg per pit can be mixed with topsoil before planting seeds. Sow one or two moringa seeds per pit at a depth of 2 cm. The seeds germinate 5-12 days after planting. If two seeds germinate, remove the weaker seedling after they reach about 30 cm. For leaf, pod and seed production, space plants 3-5 m apart. For intensive production of leaves, space plants 10-20 cm within rows 30-50 cm apart. Moringa grows well in most soils without adding fertilizer. However, for optimum growth and yields, fertilization is recommended at planting time and at least once a year before the rainy season. Dig trenches around the base of the plant (10-20 cm from the base) and apply approximately 300 g of a commercial nitrogen fertilizer per tree, or compost or well-decomposed farmyard manure at the rate of 1-2 kg/tree. For optimal growth, it is advisable to irrigate regularly during the first 3 months after seeding. Once established, moringa rarely needs watering unless persistent wilting is evident.

To encourage the development of many branches and pods within easy reach from the ground, prune the apical growing shoot when the tree is 1-2 m high. Thereafter, cut the growing tips of the branches so that the tree will become bushier. Leaves can be harvested after plants grow 1.5-2 m tall, which usually takes at least one year. Harvest leaves by snapping leaf stems from branches. Harvesting young shoot tips will promote development of side branches. For making leaf sauces, harvest seedlings, growing tips or young leaves. Older leaves can be stripped from the tough and wiry stems and are more suited for making dried leaf powder. Moringa trees will flower and fruit annually and in some regions twice annually. Harvest pods when they are young, tender and green, about 1 cm in diameter. Older pods are fibrous and develop a tough shell, but their pulp and immature seeds remain edible until shortly before the ripening process begins. Moringa seeds have no dormancy period, so they can be planted as soon as they are mature and they will retain the ability to germinate for up to one year.

Nutrition and cooking:
Moringa leaves are a good source of proteins, calcium, iron, potassium, and vitamins A, C and E; pods are rich in phosphorus. Leaves can be eaten as salad greens, cooked, or combined with staples such as rice or wheat, pickled or added to curries and soups. Dried leaves can be rubbed into a powder and added to soups or porridge. Young pods can be boiled, steamed, fried or shelled; the immature seeds can be used like peas or fresh beans. Mature seeds can be fried or roasted. Fresh or dried flowers are used for making tea.