

## How to prepare and use the leaves

After you have picked the leaves you need to wash off any sand. You can use fresh leaves straight away by boiling them in water or you can store them to use later.

Extra leaves can be boiled, shaped into flat, round cakes (evanda, omuvanda) and dried. These cakes can then be sold or you can store them and use them later. Make sure you store them in a cool, dry place where rodents and insects can't get to them.

You can use the leaves to make a green sauce (relish) to eat with starchy food such as mahangu (oshifima), maize, sorghum and cassava.

You can use the leaves of mutata as a vegetable, and also use the dried flower calyces as a (red) tea.

Green leafy vegetables are high in fat-soluble vitamins. When you eat them, you should add a little bit of fat, such as meat, butter, margarine, cooking oil, cheese or salad dressing to make sure your body can absorb all of the vitamins and minerals in the leaves.

*Ekwakwa*



*Ombidi*



*Ekwakwa*



**Make Green Leafy Vegetables a part of your daily diet to improve your health.**

**Including a handful in your meals is a tasty way to make sure you and your family get the vitamins and minerals you need.**

### *Contacts for more information*

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# Indigenous Green Leafy Vegetables



**Namibia's  
natural power foods:  
how you can grow  
and use them**

## Benefits of growing traditional Namibian Green Leafy Vegetables

**Health benefits and nutritional value** They are a good source of the vitamins, minerals, iron, dietary fibre and omega-3 fatty acids your body needs to stay healthy. If you eat them on a regular basis they can have a dramatic, positive impact on your personal health.

**Cheaper to produce** Growing traditional GLVs is cheaper than growing exotic leafy vegetables like spinach and swiss chard or buying them from supermarkets. This is because the indigenous types grow better under the marginal climatic conditions of Namibia than exotic ones. They need less water, less fertiliser, less attention, are less susceptible to pests and diseases and their seeds are widely available at no cost.

**Availability and ease of growing** Traditional GLVs grow naturally during the rainy season, especially from December to February. Their adaptability and wide distribution in Namibia makes them available in most areas in large amounts, and they are easy to pick and use. Most leafy green traditional vegetables are fast-growing plants which often grow easily in crop fields and produce lots of seeds. More permanent plants (perennial bushes and trees) provide a steady supply of leaves each year throughout the growing season.

**Income generation** You can earn extra money by growing, collecting, preparing and selling the leaves.

### Enhanced food security

You can dry the leaves and store them for many months until you want to use them.

Omutete



Ombidi



## What are Green Leafy Vegetables?

People all over the world cook and eat the green leaves of plants as vegetables. These are Green Leafy Vegetables (GLVs), also called spinach, pot herbs, green vegetables, greens, leafy greens. They are considered 'power foods' due to their health and nutritional benefits.

There are nearly a thousand different plants with edible leaves. Some are annual plants, seeding and re-growing every season, and the others are perennial, growing as bushes for many years.

In many parts of Namibia lots of indigenous plants are used traditionally as food, such as the well-known and popular ombidi (*Cleome gynandra*), ekwakwa (*Amaranthus thunbergii*) and omutete (*Hibiscus sabdariffa*).

## How to grow GLVs

Most traditional GLVs in Namibia have similar growing needs:

**Seed collection** Collect the seeds once they have ripened on the plants, usually late in the rainy season or during the dry season. You should harvest them before they fall off the plant to make sure you can collect enough. Store the seeds in paper bags in a dry, cool place until you use them. You should try to use fresh seeds because they germinate best, but if you need to you can keep the seeds for 2-3 years.

**Growing area** Make the growing area level so that the seeds don't wash away when you water them or when it rains. Try to use sandy or loamy soil, with low clay content so there is good drainage. This is important as the plants do not like water-logged roots. Break up the soil surface of the growing area so that the soil is loose and not hard. Make your growing area in full sun and weed it often because the vegetables do not compete well with other plants. Protect the area from livestock and other animals so they can't damage or eat the plants.

**Sowing and germination** Most GLVs have small seeds and it is difficult and time-consuming to sow them one-by-one. You can sow the seeds by broadcasting (throwing out by hand) a large number of the seeds over the growing area. Another way is to mix the seeds with some fine sand and then pour it out in rows. Once you have sown the seeds cover them with soil by gently raking the soil surface. Try not to plant the seeds more than 0.5cm deep. With some species, such as mutate, it is best to soak the seeds in water overnight so they germinate faster. Sow the seeds just before the first rains of the season, but no later than the end of January. After you sow the seeds keep the soil damp until the seeds germinate. If it does not rain you will need to water them.

**Looking after the plants** Once the plants have germinated you don't need to do much maintenance. If you can, water them frequently because they will then produce more leaves. Weed the growing area often and check your plants regularly for any pests or diseases.

**Fertiliser use** You can fertilise your plants by digging animal manure into the growing area before you sow the seeds and you can add more throughout the growing season. Although it is not necessary to add fertiliser your plants will produce more leaves - and the leaves will be bigger and healthier - if you do, giving you a larger crop for a longer time. Artificial fertilisers which are high in nitrogen can also be used, but these are expensive. If you do use them, make sure you follow the instructions on the packet.

**Pests and disease** Look at your plants often to check for pests and/or diseases. Common pests include beetles, red spider mites, caterpillars, leaf miners and certain birds. Some of these can be controlled by picking them off the plants by hand. You could buy commercial pesticides but they are expensive and need to be stored and used correctly so that they don't harm the people who eat the plants. Remove and burn any plants which are infected by fungus so that the fungus doesn't spread to your other plants.

**Season** The plants grow in the warm summer months, mainly during the rainy season. They do not grow during the colder, drier winter months (April to September).

**Harvesting** The first harvest is often a thinning-out of the seedlings to increase the space between the plants. Take out whole young plants. Once the plants are mature, you can pick their younger leaves every day. You can harvest leaves from the plants for months, until they start producing seeds.