

Cassava



ERGOFITO

www.ergofito.co.za

Tel: + 27 21 447 7114 / Email: ergofito@telkomsa.net

Cassava, *Manihot esculenta*, also called manioc, yuca, balinghoy or kamoteng kahoy (in the Philippines), tabolchu (in Northeast India (Garo Hills)), mogo (in Africa), mandioca, tapioca-root, kappa (predominantly in India) and manioc root, a woody shrub of the Euphorbiaceae (spurge) family native to South America, is extensively cultivated as an annual crop in tropical and subtropical regions for its edible starchy tuberous root, a major source of carbohydrates.

It differs from the similarly spelled yucca, an unrelated fruit-bearing shrub in the Asparagaceae family. Cassava, when dried to a powdery (or pearly) extract, is called tapioca; its fermented, flaky version is named garri.

Cassava is the third largest source of food carbohydrates in the tropics, after rice and maize. Cassava is a major staple food in the developing world, providing a basic diet for over half a billion people. It is one of the most drought-tolerant crops, capable of growing on marginal soils. Nigeria is the world's largest producer of cassava, while Thailand is the largest exporting country of dried cassava.

FERTILISATION:

The recommended fertilization for as cassava is as follows:

pH	6 to 7
N	65 Kg per Hectare
P	28 Kg per Hectare
K	125 Kg per Hectare
Ca	49 Kg per Hectare
Mg	21 Kg per Hectare

Yield 22 to 30 tons per Hectare

Once **Ergofito** is introduced in the fertilization, the above indicative fertilization quantum can be reduced by 35 %. The reasons are described further in this document.

ERGOFITO

www.ergofito.co.za

Tel: + 27 21 447 7114 / Email: ergofito@telkomsa.net

ERGOFITO APPLICATION:

Cassava

Cassava is an underground plant part used as a vegetable.

Ground preparation:

Although this first step is a recommendation only, therefore optional, we strongly advise to apply it to ensure that the soil has a healthy bacteriological activity prior seeding or transplanting seedlings.

Bio Agent	Quantity	Area
ERGOSTART BIO	125 Kg	Per Hectare

Following application of the **Ergostart Bio**, wait 15 days prior seeding or transplanting. The above is applied with sufficient water, generally diluted 1:50 (1Kg of **Ergostart Bio** per 50 liters of water).

Ergostart Bio will immediately start decomposing all inert organic matter into plant food. More important it will de-mineralize any accumulation in the rhizosphere that is and has suffocated the soil. It will start by converting all of the above into humus, thus rejuvenating tired soils and allow normal and healthy roots development.

Ergofito Universal Plus application:

After ensuring that the soil has all the required minerals, trace elements, correct pH.

Apply **Ergofito Universal Plus** in the following manner:

FIRST APPLICATION:

Bio Agent	When	Quantity
ERGOFITO UNIVERSAL PLUS	When Planting or Seeding	5 Kg Per Hectare

ERGOFITO

www.ergofito.co.za

Tel: + 27 21 447 7114 / Email: ergofito@telkomsa.net

SECOND APPLICATION:

Bio Agent	When	Quantity
ERGOFITO UNIVERSAL PLUS	3 Months after Seeding	5 Kg Per Hectare

THIRD APPLICATION:

Bio Agent	When	Quantity
ERGOFITO UNIVERSAL PLUS	6 Month After Second Application	5 Kg Per Hectare

To apply the above to either the soil or as foliar application, mix **Ergofito Universal Plus** with water at a minimum ratio of 1:200.

Ergofito Universal Plus can be distributed radically via the drip irrigation simultaneously with the regular fertilization. It can be applied via a pivot, bowser or any existing method of irrigation available.

GENERAL INFORMATION:

All the produce generated by plants depend on the chlorophyll's' utilization the sun's energy. Photosynthesis transforms carbon dioxide in the atmosphere, water and minerals (azotic compounds, phosphorus, potassium, sulphur, calcium, magnesium, iron, etc.) into living organic material. This process is influenced by the following factors:

- Number of leaves.
- Size of leaves.
- Number of chloroplasts and their efficiency.
- Quantity of chlorophyll.
- Availability and assimilability of the nourishing elements.
- Water availability.
- Temperature.

ERGOFITO

www.ergofito.co.za

Tel: + 27 21 447 7114 / Email: ergofito@telkomsa.net

As **ERGOFITO** increases the abundance and size of the leaves it directly stimulates the production of chlorophyll that in turn builds up the number of chloroplasts while increasing their efficiency.

With a greater surface area exposed to sunlight more energy is captured. This energy is utilized more effectively now because the principle nutrients are available and assimilable and the chlorophyll has its' chloroplasts working at maximum efficiency.

In these conditions crops can grow stronger in all aspects, in particular:

- Cells are larger.
- Cuticles are thicker and stronger and so less vulnerable to disease and Phytophagous (insect) attacks.
- Lymphatic vessels get bigger letting the lymph circulate easier thus consuming less energy.
- Plant fibres expand in size due to the increased levels of sugars, cellulose fibres, lignin, vitamins, mineral salts, organic acids, etc.



ERGOFITO

www.ergofito.co.za

Tel: + 27 21 447 7114 / Email: ergofito@telkomsa.net