



**Eat orange-fleshed
sweet potato for
vitamin A**



Orange-fleshed Sweet Potato



Combating vitamin A deficiency

Vitamin A deficiency (VAD) is a public health problem in South Africa. A recent national survey showed that 43.6% of 1-9 year-old children and 27% of women at childbearing age suffer from VAD. Vitamin A is important for normal vision and for immune response (fighting infection). Vitamin A deficiency is the result of insufficient intake of foods rich in vitamin A. Consumption of provitamin A-rich vegetables such as orange-fleshed sweet potato, is a long term strategy promoted by the Agricultural Research Council (ARC) to reduce this deficiency.

Orange-fleshed sweet potato is a very useful food for school feeding and nutrition centres.



Orange-fleshed sweet potato as a nutritious food

Sweet potato is an excellent source of energy, while containing substantial quantities of vitamin C and also contribute B-vitamins and minerals such as magnesium, zinc and iron to the human diet. It provides abundant quantities of provitamin A in the form of beta-carotene. Most of the beta-carotene is retained during boiling and the efficacy of orange-fleshed sweet potato to improve the vitamin A status has been proven by the South African Medical Research Council. This crop has been used in large-scale provitamin A interventions in Mozambique and Uganda with great success.

The ARC has developed orange-fleshed varieties with pleasant taste, high yield, dry texture and sweet taste containing high quantities of beta-carotene. Variety **KHUMO** contains ~8000µg/100 g boiled root (or 660 µg/100 g retinol activity equivalents (RAE)). A 60 g boiled portion of this orange-fleshed sweet potato provides the dietary requirement of most age groups.

Young sweet potato leaves and tips are eaten as green vegetable and are quite nutritious.

Production practices

The crop is sensitive to frost, and this affects the planting season:

Area	Months for planting
Frost-free	Aug to March
rainfall	Winter Nov to Dec
Light to mild frost	middle Oct to Dec



Heavy frost

Mid Nov to mid Dec

Farmers can use staggered planting to lengthen the availability during the year by planting every month as from October to January in order to harvest as from February until August the following year. Sweet potatoes are established by means of cuttings (20-30cm long), planted with 3-4 nodes underground. The spacing between rows can be 0,75 – 1m with an in-row spacing of 2530cm. Planting on ridges is recommended since it will increase marketable yield with less damage to the sweet potatoes during harvesting. Harvest sweet potato after 4½ months (warm areas) to 5 months (moderate areas) after planting. Various products can be made such as chips, juice, doughnuts.

Unmarketable roots and vines can be used as fodder.



Availability of planting material

Cuttings are disseminated from Sweet Potato Vine Growers Association (SPVGA) growers in bags (large orders) or bundles (small orders). The ARC supplies the vine growers with cuttings of disease-tested source, ensure effective management of the nursery block in terms of disease and pest control in order to disseminate good quality, healthy cuttings for production. The vine growers are required to comply to set production standards. The nursery blocks are inspected and approved by officials of the ARC before cuttings may be disseminated.



Large quantities of cuttings of new ARC cultivars can be obtained from growers from August till May.

Province	District Municipality	Nearest town	Vine grower	Contact nr
Limpopo	Makhado	Dzanani	Mr T Ramathavhana	083 400 5759
Limpopo	Vhembe	Makhado	Mr Matebula	082 543 3990

North West	Bojanala Platinum	Rustenburg	Mr Caleb Dibetso	083 274 3747



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