



### OUTSTANDING QUALITIES

- ◆ SEMI-BUSH TYPE PLANTS
- ◆ HIGH YIELD POTENTIAL
- ◆ VERY UNIFORM FRUIT
- ◆ MAINTAIN DARK GREEN SKIN COLOUR DURING STORAGE

**Tropicana** is an F1 hybrid tropical butternut variety with a very vigorous, semi-bush type plant. It produces high yields with very uniform fruit. The fruit has a dark green skin colour with thin tan coloured stripes running vertically to the blossom end. The fruit has very good storage ability and maintains the dark green skin colour even after long periods of storage. The flesh has an intense dark orange colour and tends to be sweeter compared to the normal butternut type.

### SPECIAL VARIETAL REQUIREMENTS

- Make sure that mature fruit is ripe before picking. Light green stripes must have discoloured into a normal tan colour before picking

CHARACTERISTIC*	TROPICANA
KIND	F1 hybrid squash ( <i>Cucurbita moschata</i> (Duchesne) Duchesne ex Poiret)
TYPE	Tropical butternut squash
MATURITY	90 - 100 days
SEASON	Widely adapted for production after danger of frost has passed
PLANT TYPE	Semi-bush
FRUIT SHAPE	Cylindrical, with a bulbous blossom end
RIND COLOUR	Dark green thick and thin tan coloured stripes running vertically to the blossom end
YIELD POTENTIAL	Very good
MATURE HARVEST MASS	1 – 1.5 kg
SHELF LIFE (MATURE FRUIT)	Excellent
UNIFORMITY	Excellent
POPULATION GUIDE	12 000 to 15 000 plants per ha
DISEASE REACTION (SCIENTIFIC)	-
MARKETS / END USE	Fresh market

\* Characteristics given are affected by production methods such as soil type, nutrition, planting population, planting date and climatic conditions. Please read disclaimer.

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\* Experimental: This variety does not appear on the current South African Variety list, but has been submitted for registration.  
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## GENERAL TIPS FOR BUTTERNUT PRODUCTION

### Spacing, planting depth and planting of seed

The ideal plant population for butternuts is between 12 000 - 18 000 plants per hectare. With a general seed count of 10 seeds per gram (10 000 seeds per kg), approximately 1 kg of seeds is needed for 1 ha at a plant population of 10 000 plants per ha. A general recommendation for butternuts is 1.0 - 1.5 m between rows and 0.5 m within the rows. This may be adapted to some extent to climatic conditions and/or available implements.

### Plant spacing guide for the distance between plants in the row:

Between row spacing	Plant population		
	12 000	15 000	18 000
1.0 m	83 cm	66 cm	55 cm
1.6 m	52 cm	42 cm	34 cm

Butternut seed should be planted 30 - 40 mm deep. Under ideal conditions, the field should be thoroughly irrigated before planting. The seed should make good contact with the seedbed and be covered with soil that is not so wet that it forms an impervious layer on drying. No irrigation should be applied before emergence as this may cause crust formation. Should it rain before emergence and a crust be formed, the soil should be kept damp with light overhead irrigation for the seedlings to be able to emerge.

During hot weather, it is advisable to protect the soil surface from drying out by means of mulch such as wood chips, bark or straw. After emergence, the mulch should be removed to prevent the development of spindly plants.

The seed should not be planted too shallow, as the top layer of the soil will dry out quickly, resulting in poor field germination. It should also not be planted too deep as the seedlings are more prone to disease due to the extended pre-emergence period.

### Irrigation

Calculating how much water to apply at each irrigation, requires an estimate of the crop's rooting depth and the water-holding capacity of the soil. Light irrigation is needed more frequently at early seedling stages because the plant has only a small soil water reservoir. Later in the season, less frequent but deeper irrigations are used to replenish a larger rooted volume. Information on water-holding capacity is important so to avoid adding more water at any one time than the soil can hold. Maintain soil moisture above 60% of the soil water holding capacity.

Light-textured soils hold less water than heavy clay soils; thus a grower with a sandy soil will irrigate more frequently and apply less water at each irrigation-application.

Irrigation requirements for pumpkins and squashes are influenced by many factors. As a general guide, observe the following for a sandy loam soil type.

Days from planting	Root depth	Total amount of water required
0 - 30	15 cm	27.4 mm
31 - 70	30 cm	35.8 mm
71 - 110	45 cm	54.9 mm
110 - maturity	>61 cm	73.2 mm

It is important to keep the temperature and wind factor in mind as high temperatures and wind lead to an increase in evapotranspiration.

### Disease resistance definition

**Resistance:** is the ability of a plant variety to restrict the growth and development of a specified pest or pathogen and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest or pathogen pressure. Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure. Two levels of resistance are defined:

**High/standard resistance (HR):** plant varieties that highly restrict the growth and development of the specified pest or pathogen under normal pest or pathogen pressure when compared to susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest or pathogen pressure.

**Moderate/intermediate resistance (IR):** plant varieties that restrict the growth and development of the specified pest or pathogen, but may exhibit a greater range of symptoms or damage compared to resistant varieties.

Moderately/ intermediately resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest or pathogen pressure.

### Susceptibility definition:

Susceptibility (S) is the inability of a plant variety to restrict the growth and development of a specified pest or pathogen.

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