SAKATA®
PASSION in Seed

Veenas

F1 Hybrid Butternut Squash

TB REF : VEENAS: 01/04/2024

P.B.R.

OUTSTANDING QUALITIES

- ♦ **UNIFORM, SMALL TO MEDIUM SIZED FRUIT**
- ♦ **EXCELLENT YIELD POTENTIAL**
- ♦ **SUITABLE FOR PRE-PACKING AND EXPORT**
- ♦ **INTERMEDIATE RESISTANCE TO POWDERY MILDEW**

Veenas F1 hybrid is a *Cucurbita moschata* type butternut. Fruit is small to medium in size with excellent fruit quality and uniformity. Plants are widely adapted and yield potential is excellent. Fruit set is excellent and covers a long bearing season. Fruit weigh between 0.6 and 1 kg, has a short Waltham shape and is not inclined to crack. The flesh is very firm, yellow-orange in colour and has an excellent flavour. The rind is very smooth and tan in colour when mature. The mature fruit has an excellent shelf life. **Veenas** is well adapted for warm season harvests where small to medium sized fruit are required and is the variety of choice for exporters looking for small fruit size. **Veenas** has intermediate resistance to Powdery mildew (Px) (ex Sf).

SPECIAL VARIETAL REQUIREMENTS

- **Veenas** is suggested for warm season plantings only as fruit size decreases during cool seasons
- Fruit size is affected by plant population: The higher the population, the smaller the fruit size
- Suggested plant population is 10 000 – 15 000 plants per hectare

CHARACTERISTIC*	VEENAS
KIND	F1 hybrid squash (*Cucurbita moschata* (Duchesne) Duchesne ex Poiret)
TYPE	Butternut squash
MATURITY	85 - 100 days to harvest as mature fruit
SEASON	Widely adapted for warm season production
PLANT TYPE	Full vine
FRUIT SHAPE	Short cylindrical, with a bulbous blossom end
RIND COLOUR	Tan
YIELD POTENTIAL	30 - 45 t/ha
MATURE HARVEST MASS	0.6 – 1 kg
SHELF LIFE (MATURE FRUIT)	Excellent
UNIFORMITY	Excellent
POPULATION GUIDE	Final stand of 10 000 – 15 000 plants per ha
DISEASE REACTION (SCIENTIFIC)	**Intermediate resistance:** *Podosphaera xanthii* (ex *Sphaerotheca fuliginea*) Px (ex Sf)
MARKETS / END USE	Export, pre-packing, fresh prepared stuffing
SPECIAL FEATURES	Uniform, small to medium fruit size, excellent yield potential

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

P.B.R. WARNING: VARIETY PROTECTED UNDER **PLANT BREEDERS RIGHTS**. UNAUTHORIZED MULTIPLICATION AND/OR MARKETING OF SEED PROHIBITED.

Disclaimer: This information is based on our observations and/or information from other sources. As crop performance depends on the interaction between the genetic potential of the seed, its physiological characteristics, and the environment, including management, we give no warranty express or implied, for the performance of crops relative to the information given nor do we accept any liability for any loss, direct or consequential, that may arise from whatsoever cause. Please read the Sakata Seed Southern Africa (Pty) Ltd Conditions of Sale before ordering seed.
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 (HR = High resistance, IR = Intermediate resistance).
* 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

Flowering, pollination and fruit set
Butternuts have separate male and female flowers on the same plant. Pollen must be transferred from male to female flowers by bees or other insects in order to get high yields of good quality fruit. Bees are the most important pollinators of cucurbits. If bees are not abundant in the field at flowering time, hives should be placed next to the field, with at least 3 hives per hectare, placed within 150 m of the field. Poor yields often result due to a scarcity of bees. There should be no other flowers in the vicinity that are more attractive to bees like Lucerne, etc. Special precautions should be taken with insecticide treatments during flowering. Only systemic pesticides should be sprayed and should be done in the afternoon or on cool, cloudy days as bees only visit flowers in the morning. Systemic pesticides sprayed the previous afternoon should be absorbed by the following morning and the minimum number of bees will, therefore, be killed.

The most single important factor that will contribute to the yield is good pollination.

The best fruit set in butternuts is found at nodes 5 – 8 on the plant. In general, butternuts set fruit at the plant base and after the first set induce a new set at the end of the vine. Energy (carbohydrates) in the plant is translocated in a basal direction (starch manufactured in the leaves, mainly moves in the direction of the roots and not to the end of the vine), therefore fruit setting at the end of a vine causes an energy imbalance in the plant which may have a negative effect on fruit set and fruit development and may lead to abnormal or malformed fruit.

All plants in the Cucurbit family have extensive, shallow root systems and it is very important to note that the anchor root that originates from the axils of the vine should not be damaged as this might lead to fruit abortion.

Fertilisation
General recommendation
Due to the diversity of soil types, it is not possible to give a standard fertilisation programme. Such a programme should be based on the results of soil analysis.

Butternuts respond very well to manure applications and this should be taken into account when determining the amount of fertiliser needed. It is important to take the amount of nitrogen in the soil into account as our F1 hybrids have very aggressive root systems that can utilise residential nitrogen as much as a meter deep.

These hybrids are very strong and vigorous growers and therefore it is important that it should not be over fertilised, especially with nitrogen, as it will cause an increase in vegetative (leaf) growth and a reduction in reproductive growth (fruit set).

It is very important to make sure that the calcium level in the soil is sufficient. Ca is responsible for intercellular binding and therefore plays an important role in fruit firmness that will eventually determine the storage life of the fruit.

Micro-elements
Like all plants, butternuts require extremely small quantities of micro-elements, which are essential for healthy growth and production. Often only single plants or groups of plants show symptoms of micro-element deficiencies. Soil analyses will assist in determining the micro-nutrient content of the soil; however, leaf analyses will identify the actual content within the plant. Leaf samples must be taken from the youngest mature leaves on the vine.

Molybdenum deficiencies occur frequently in the Lowveld and the Western Cape where the pH of the soil is below 6.0. Plants showing these deficiency symptoms are usually small, light green in colour and the edges of the leaves tend to curl upwards. Later these leaves turn white and eventually die off. The very young fruit are prone to abort. Should this deficiency be prevalent in an area, it is suggested that producers should soak the seed in a solution of 15 g sodium or ammonium-molybdate diluted in 4.5 ℓ water, for a period of 4 - 6 hours the day before planting.

Plant spacing guide: Distance between plants in the row.

Between row spacing	Plant population		
	10 000	12 000	15 000
1.0 m	100 cm	83 cm	66 cm
1.6 m	62 cm	52 cm	42 cm

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

Tolerance definition:
Tolerance (T) is the ability of a plant variety to endure **abiotic stress** without serious consequences for growth, appearance and yield. Vegetable companies will continue to use tolerance for abiotic stress.

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