



OUTSTANDING QUALITIES

- ◆ BEIT ALPHA TYPE
- ◆ IDEAL FOR PRE-PACKING
- ◆ HIGH YIELD POTENTIAL
- ◆ BRIGHT, SMOOTH, GLOSSY FRUIT

Zena is an early maturing, Beit Alpha type hybrid with very high yield potential. **Zena** has a very good flavour, smooth texture and is ideal for pre-packing at a size of 12 - 15 cm. **Zena** can handle high temperatures very well and produces abundantly during the warm season because of its continuous setting ability. Fruits have an attractive glossy green colour. **Zena** has intermediate resistance against Downy mildew (PCU), Powdery mildew (Sf) and Zucchini yellow mosaic virus (ZYMV).

SPECIAL VARIETAL REQUIREMENTS

- Contact area representative for a sowing guide

CHARACTERISTIC	ZENA
KIND	F1 hybrid cucumber (<i>Cucumis sativus</i> L.)
TYPE	Beit Alpha
FLOWERING TYPE	Parthenocarpic
PRODUCTION TYPE	Open field production
MATURITY	Early
SEASON	Year-round production in frost-free areas
FRUIT SIZE	12 – 15 cm
SHAPE	Cylindrical
COLOUR	Glossy green
SPINE COLOUR	White
SPINE DEGREE	Hardly noticeable
DISEASE REACTION (SCIENTIFIC)	Intermediate resistance: <i>Pseudoperonospora cubensis</i> (Pcu), <i>Podosphaera xanthii</i> (Px) (ex <i>Sphaerotheca fuliginea</i>) and <i>Zucchini yellow mosaic virus</i> (ZYMV)
UNIFORMITY	Very good
AVERAGE SEED COUNT	30 - 40 seeds per gram
MARKETS / END USE	Fresh market, pre-pack and gherkin
POPULATION GUIDE	12 000 – 16 000 plants per ha
SPECIAL FEATURES	Excellent disease package

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

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 CUCUMBER PRODUCTION

Temperature

Air temperature is the main environmental component influencing vegetative growth, flower initiation, fruit growth, and fruit quality. The growth rate of the crop depends on the average 24-hour air temperature, the higher the average air temperature the faster the growth. The larger the variation in day-night air temperature, the taller the plant and the smaller the leaf size. Although maximum growth occurs at a day and night temperature of about 28 °C, maximum fruit production is achieved with a night temperature of 19 – 20°C and a day temperature of 20 – 22°C. In winter, night temperatures should not go lower than 12°C.

Light

Plant growth depends on light. The plant matter is produced by the process of photosynthesis, which takes place only when light is absorbed by the chlorophyll (green pigment) in the green parts of the plant, mostly the leaves. In the process of photosynthesis, the energy of light fixes atmospheric carbon dioxide and water in the plant to produce such carbohydrates as sugars and starch. Generally, the rate of photosynthesis relates to light intensity, but not proportionally. The lower supply of carbohydrates available in the plant during the winter limits productivity, as evidenced by the increase of aborted fruit. A fully-grown crop benefits from any increase in natural light intensity, if the plants have sufficient water, nutrients, and carbon dioxide and that air temperature is not too high.

Relative humidity

High relative humidity generally favours growth. However, reasonable growth can be achieved at medium or even low relative humidity. The crop can adjust to and withstand relative humidity from low to very high but reacts very sensitively to drastic and frequent variation in relative humidity. Its sensitivity to such variation is greatest when the crop has developed under conditions of high relative humidity. Other disadvantages of cropping under conditions of high relative humidity include the increased risk of water condensing on the plants and the development of serious diseases. The resultant low transpiration rates are blamed for inadequate absorption and transport of certain nutrients, especially calcium to the leaf margins and fruit.

At low relative humidity, irrigation becomes critical, because large quantities of water must be added to the growth medium without constantly flooding the roots and depriving them of oxygen. Furthermore, low relative humidity favours the growth of powdery mildew and spider mites.

Disease resistance definitions

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

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.

Immunity (I): Not subject to attack or infection by a specified pest or pathogen.

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