SAKATA®
PASSION in Seed

Checha

F1 Hybrid Determinate Salad Tomato

TB REF: CHECHA: 01/04/2024

OUTSTANDING QUALITIES

- **GOOD FLAVOUR**
- **EARLY MATURITY**
- **TSWV RESISTANCE**
- **VERY LONG SHELF LIFE**

Checha is an early maturing long-life variety. However, because it is a long-life variety it may show delayed ripening during cooler conditions. The fruit has a jointed peduncle and has an attractive presentation in pre-packs when marketed with the calyx still attached. Fruit are globe-shaped, very firm, uniform and evenly sized weighing around 150 - 170 g. **Checha** has high resistance against Verticillium wilt race 1 (Vd: 1) and Fusarium wilt race 1 (Fol: 1) and intermediate resistance against Tomato spotted wilt (TSWV).

SPECIAL VARIETAL REQUIREMENTS

- Contact the area representative for more information

CHARACTERISTIC*	CHECHA
KIND	Determinate F1 hybrid salad tomato (L*ycopersicon esculentum* L.)
PRODUCTION TYPE	Open field
FIRMNESS	Very good
MATURITY	Early
PLANT VIGOUR	Good
SEASON	Year-round culture in frost-free areas
FRUIT WEIGHT	150 - 170 g
FRUIT SHAPE	Globe
PEDUNCLE	Jointed
ATTACHMENT POINT	Small, neat
SHOULDER	Smooth
SHOULDER COLOUR	Light green
BLOSSOM END	Neat
COLOUR	Internal: very good External: excellent
FLAVOUR	Good
UNIFORMITY	Very good
LEAF COVER	Very good
DISEASE REACTION (SCIENTIFIC)	**High resistance:** *Verticillium dahlia* race 1 (Vd: 1) *and Fusarium oxysporum* f. sp. *lycopersici* race 1 (Fol: 1) **Intermediate resistance:** *Tomato spotted wilt virus* (TSWV)
MARKETS / END USE	Fresh market
POPULATION GUIDE	12 000 - 14 000 final stand per ha (45 - 50 cm in a row, 160 cm between rows)
SPECIAL FEATURES	Good flavour and shelf life, good fruit setting during warm periods. Early concentrated fruit set

* 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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F1 Hybrid Determinate Salad Tomato

GENERAL TIPS FOR TOMATO PRODUCTION

Climatic requirements

Tomatoes can grow at a wide range of temperatures, but for optimum growth, tomatoes prefer temperatures between 10°C (minimum) and 30°C (maximum). The temperature requirements for the different growth stages can be seen in the table below. Tomatoes do not tolerate frost or waterlogged conditions, and these should be avoided at all cost. The most sensitive stages for water and temperature stress are directly after transplanting, during the flowering stage and during the fruit development stages. Water stress during these stages of tomato development will reduce yield and quality.

Developmental stage	Temperature °C		
	Min	*Opt*	*Max*
Germination	11	16 - 29	34
Vegetative growth	18	21 - 24	32
Fruit set (night)	10	14 - 17	20
Fruit set (day)	18	19 - 24	30
Red colour devel	10	20 - 24	30
Yellow colour devel	10	21 - 32	40
Chilling damage		< 6	
Frost damage		< 1	
Lethal temperature		< -2	

Puffiness

Symptoms

Fruit with puffiness may look to the ordinary person as a good-looking fruit until the fruit is cut open. A trained eye will notice that the fruit has a slad-sided or angular exterior appearance. When these tomatoes are cut in half, cavities can be seen inside. These cavities are formed between the locular contents and the outer wall. It is more pronounced with large processing (roma) type tomatoes.

Cause

Many conditions can contribute to the formation of puffiness. Contributing factors include inadequate pollination, fertilisation, seed development, improper nutrition (high nitrogen and low potassium), insufficient light, and low or high temperatures. Some varieties are more susceptible than others.

Control

One can use tolerant varieties and be sure that the correct fertilisation is used.

Phosphorus (P) deficiency

Symptoms

- Shoot growth is restricted
- Thin stems
- In severe cases, leaves are small, stiff and curved downwards
- The upper side of the leaves have a bluish-green colour
- Leaf undersides, including the veins, are purple
- The older leaves are yellow with scattered purple dry spots – premature leaf drop

Remedies

Add mono-potassium phosphate to the nutrient solution.

Bacterial spec (*Pseudomonas syringe* pv. *tomato*)

The disease may occur together with bacterial spot, yield is frequently not reduced, but marketable fruit is affected due to reduced quality. Tomatoes are the only known host for the disease.

Symptoms

Symptoms can occur on the leaves, stems and petioles
On leaflets: Round, dark brown to black lesions, with a yellow hallow. On green fruit: Small, dark spec-like lesions surrounded by a green hallow. Dark brown single spots that lack a halo may develop.

Conditions for disease development

Immature green tissue is the most susceptible. Infection and development are promoted by cool (13 - 25°C) moist weather conditions.

Prevention and control

- Seed treatment
- Crop rotation
- Avoid high humidity
- Spray with bactericides

Irrigation requirements

Tomatoes require frequent irrigation, as the plants use a large amount of water, especially under warm conditions. Tomato roots can penetrate the soil up to 1.5 m but seldom deeper than 60 cm. Water the soil thoroughly to a depth of about 60 cm. Soil type does not affect the amount of total water needed but does dictate the frequency of water application. Lighter soils need more frequent water applications, but less water applied per application. Indeterminate growers need more water than determinate ones.

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.

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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