TECHNICAL BULLETIN REF. MONICA: 31/07/2014

# MONICA

# F1 Hybrid Determinate Saladette Tomato

# **OUTSTANDING QUALI**TIES

SAKATA®

- LARGE, ATTRACTIVE FRUIT
- VERY HIGH YIELD POTENTIAL
- OUTSTANDING FRUIT QUALITY
- MULTIPLE DISEASE RESISTANCE

**Monica** is a prolific, determinate saladette type tomato. It is widely adapted and offers excellent fruit setting. **Monica** has high resistance against Verticillium wilt race 1 (Vd: 1), Fusarium wilt races 1 and 2 (Fol: 1 - 2) and intermediate resistance against Alternaria stem canker (Aal), Gray leaf spot (Ss) and Bacterial speck (Pst). Blocky fruits are slightly elongated, with a shiny, bright red colour and weigh 120 – 220 g. **Monica** is recommended for long distance transportation if harvested when the fruit has a red colour spot on shoulder.

# SPECIAL VARIETAL REQUIREMENTS

- Monica performs best in winter in frost-free areas
- Harvest if the fruit has a red spot on the shoulder

MONICA	
F1 hybrid tomato (Lycopersicon esculentum L.)	
Determinate saladette	
Good to very good	
Medium	
Winter culture in frost-free areas	
120 - 220 g	
Blocky	
Small, neat	
Fruit shoulder very light green turning red. Excellent internal and external colour	
Very good	
Excellent	
High resistance: Verticillium dahliae race 1 (Vd: 1), Fusarium oxysporum f. sp. lycopersici races 1 and 2 (Fol: 1 - 2) Intermediate resistance: Alternaria alternata f. sp. lycopersici (Aal), Stemphylium solani (Ss) and Pseudomonas syringae pv. tomato (Pst)	
Processing and fresh market	
15 000 – 24 000 final stand per ha	
High yield potential, suggested for production in winter	

\* 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). Recent version: Kindly contact Sakata or Area Representative for the most recent version of this Technical Bulletin.

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MayFord



# **Climatic requirements**

Quality • Reliability • Service

Monica is the choice for winter production and produces high quality fruit between 120 - 220 g in the cooler temperatures. Do not plant any varieties where there is a risk of frost conditions, this will damage the plant and cause yield losses.

# **Cultural methods**

Trellising of Monica can be well rewarded. Good results are also achieved without staking and if care is taken not to damage the plant during harvest, the plant can sustain production over a longer period. The suggested plant population of Monica would be between 15 000 and 24 000 plants per hectare depending of the time of transplanting.

#### Harvesting

Monica sets a lot of fruit at the beginning and keeps on setting fruit longer than normal saladette tomatoes. As the first fruit start ripening, the plant is still flowering and thus has the ability to set and produce more fruit once the first fruit have been harvested.

#### Marketing

The superior quality fruit of Monica makes this a must for fresh market saladette production. The fruit of this variety can be used for added value marketing where extra attention will be place on packaging. The fruit has excellent firmness, taste, shelf life and produces a large attractive fruit.

#### **Fertilisation**

Monica can be managed on a standard fertiliser program recommended for saladette tomatoes, but enough nitrogen should be applied in the beginning in order to build a proper frame to carry the fruit load. The variety has a vigorous growth habit.

### 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.

# **N-deficiency**

Conditions favoring the appearance of Nitrogen (N) deficiency in tomato plants

- Leaching rains
- Soils with low organic matter
- Restricted substrate volume
- Inadequate fertiliser

Symptoms

- Spindly plant
  Lower leaves appear yellowish green
- In severe cases the entire plant is pale green
- Major veins show a purple colour
- Small fruit
- Small fruit

The ideal soil analysis for growing tomatoes would compare to:

pH(H <sub>2</sub> O)	5,6
Phosphate	60 mg kg <sup>-1</sup> (Bray 1)
Potassium	100-250 mg kg <sup>-1</sup>
Calcium	300-2 000 mg kg <sup>-1</sup>
Magnesium	120-300 mg kg <sup>-1</sup>
Sodium	10-50 mg kg <sup>-1</sup>

#### The range test

This is a vigor test, and is designed to give the seedling grower additional information about the lot's potential to perform at a range of temperatures (above and below ideal). As with the germination test, all other factors remain constant, it is only the temperature that varies. Both the radicle count and the final germination count are provided for 6 test temperatures after 120 hours. In nurseries where germination rooms are not used the range test should be looked at very carefully and temperatures should be monitored to insure good germination. It can be possible that the radicle count is higher than the final germination count, as some seeds that do produce a radicle, may turn out to be abnormal. If this is the case the lower count between the two should be used. Ask your representative for a copy of a lot specific range test.

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