

# MAOR

## F1 Hybrid Sweet Pepper

### OUTSTANDING QUALITIES

- ◆ MEDIUM THICK WALL
- ◆ EXCELLENT FRUIT QUALITY FOR OPEN POLLINATED VARIETY
- ◆ GOOD YIELD POTENTIAL
- ◆ STRONG PLANT




**Maor** is a popular medium maturing California Wonder type sweet pepper due to its high yield potential and excellent quality fruit. **Maor** is ideal for open field production and bulk packaging. **Maor** has a very high percentage of large fruit. Fruit are heavy and have thick fruit walls with colour being green going red. Plants are uniform, strong and sturdy. **Maor** has high resistance to Tobacco mosaic (TMV).

### SPECIAL VARIETAL REQUIREMENTS

- For open field production only
- Fruit tend to be long blocky under cool conditions, we therefore suggest production in summer

CHARACTERISTIC*	MAOR
KIND	Open pollinated sweet pepper ( <i>Capsicum L.</i> )
TYPE	Blocky, California Wonder type
MATURITY	Medium
FRUIT DIMENSIONS	Approximately 9 x 9 cm (app. 160 g)
FRUIT SHAPE	Blocky – long blocky
FRUIT WALL	Thick
SMOOTHNESS	Smooth surface
FRUIT COLOUR	Green turning red
PLANT TYPE	Very compact
DISEASE REACTION (SCIENTIFIC)	<b>High resistance:</b> <i>Tobacco mosaic virus (TMV)</i>
PRODUCTION	Open field
POPULATION GUIDE	Open field: 20 000 – 35 000 plants per ha
USE	Pre-packing and bulk packaging
SPECIAL FEATURES	Open pollinated variety with excellent fruit quality and high yield

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

 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).

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

## GENERAL TIPS FOR SWEET PEPPER PRODUCTION

### Climatic requirements

- Peppers grow best when relative humidity (RH) is 65 – 75 %
- Maintain good ventilation (0.5 m/s) to keep conditions favourable for transpiration
- Pepper plants need good light (1 100 – 1 300  $\mu\text{s}/\text{m}^2$  or 60 000 lux). Heavy shade can induce stress, but light shade stimulates growth
- The ideal temperature is around 18 °C (minimum) and 25 °C (maximum)
- Temperatures lower than 15 °C result in very poor growth
- Temperatures higher than 28 °C induce stress

### Blossom end rot (BER)

#### Causes

- Genetic. Varieties differ in their tolerance to this disorder
- BER is usually associated with a localised calcium (Ca) deficiency in the blossom end of young fruit
- High relative humidity limits transpiration and therefore Ca-uptake
- Low humidity may cause BER as water, with dissolved nutrients flow to leaves and not to fruit
- BER incidence increases when the ratio ppm N-NO<sub>3</sub> : ppm N-NH<sub>4</sub> is < 5:1
- High salinity increases BER

#### Control

- Remove affected fruit as soon as symptoms are visible
- Choose varieties which are less sensitive to BER
- Reduce stress (temperature, light intensity, salinity, etc)
- Control RH to < 90 % and maintain good ventilation to ensure transpiration and uptake of Ca
- Calcium based foliar spray may help to reduce BER after periods of humid, cloudy weather
- Well balanced nutrient solution

### Powdery mildew

In the production of sweet peppers Powdery mildew is the most common disease and of vast economical importance. The only effective way to control Powdery mildew is to have a holistic approach in the production of sweet peppers.

Conditions that encourage the growth of Powdery mildew include temperatures of 15.5 – 27 °C. Powdery mildew spores can survive at temperatures as low as 4 °C, under low light intensity and have the ability to germinate in the absence of water.

Conditions that suppress disease development include water on the plant surface for extended periods of time, day temperatures above 32 °C and night temperatures above 18 °C, direct sunlight and high pH conditions on the leaf surface.

### Flat fruit

#### Causes

- The occurrence of short-blocky or flat fruit is common for some varieties under high temperature conditions
- Low temperatures can cause flat fruit as fertilisation does not take place when temperature is too low
- Incidence of short blocky fruit increases with high N-concentration in the nutrient solution

#### Control

- Select varieties suited to the environmental conditions
- Control greenhouse temperature to 18 – 30 °C, or produce during a cooler time of year
- Keep the ratio ppm N-NO<sub>3</sub> : ppm N-NH<sub>4</sub> to around 5:1 and limit the N-NH<sub>4</sub> concentration to < 32 ppm

### Variety choice

- Know the market preferences re size, colour, fruit quality, packaging etc
- Know the climate of the area and the greenhouse (rainfall, temperature, humidity, ventilation and air circulation)
- Know which diseases are prevalent in the area and when they occur most commonly
- Get as much information as possible about each variety
- Each variety has its own requirement regarding ideal climate, trellising method, growth habit and disease resistance. Spread risk by planting more than one variety.

**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.