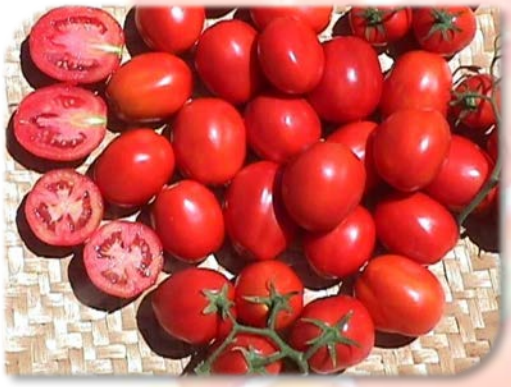
P.B.R.

LEGATO

F1 Hybrid Determinate Saladette Tomato

OUTSTANDING QUALITIES



- **OUTSTANDING DISEASE RESISTANCE**
- **VIGOROUS GROWTH HABIT**
- **VERY HIGH YIELD POTENTIAL**
- **SMALL FRUIT WITH HIGH BRIX**

Legato is a unique multiple disease resistant processing variety with strong vigour and very good leaf cover. Yield potential is excellent and fruit have a high Brix. Advantages over American type processing tomatoes are the outstanding disease resistance, local adaptability and consistent high performance. **Legato** is suitable for drying. **Legato** has high resistance to Verticillium wilt race 1 (Vd: 1), Fusarium wilt races 1 and 2 (Fol: 1 - 2), Root-knot (Mi, Mj), Bacterial wilt race 1 (Rs: 1) and intermediate resistance to Bacterial canker (Cmm), Bacterial speck (Pst), Bacterial spot Xcv (now Xav) and Tomato spotted wilt (TSWV).

SPECIAL VARIETAL REQUIREMENTS

- Contact your area representative for more information

CHARACTERISTIC*	LEGATO
KIND	F1 hybrid saladette tomato (*Lycopersicon esculentum* L.)
TYPE	Determinate
FIRMNESS	Good to very good
MATURITY	Early
SEASON	Year round culture in frost free areas
FRUIT WEIGHT	90 - 110 g
FRUIT SHAPE	Blocky
ATTACHMENT POINT	Small, neat
FRUIT COLOUR	Fruit shoulder very light green turning red. Excellent internal and external colour
UNIFORMITY	Very good
LEAF COVER	Excellent
DISEASE REACTION (SCIENTIFIC)	***High resistance:*** *Verticillium dahliae race 1 (Vd: 1), Fusarium oxysporum f. sp. lycopersici races 1 and 2 (Fol: 1 - 2), Meloidogyne incognita (Mi) and Meloidogyne javanica (Mj), Ralstonia solanacearum race 1 (Rs: 1)* ***Intermediate resistance:*** *Clavibacter michiganensis subsp. michiganensis (Cmm), Pseudomonas syringae pv. tomato (Pst), Xanthomonas campestris pv. vesicatoria Xcv (now Xav) (now Xanthomonas axonopodis pv. Vesicatoria) and Tomato spotted wilt virus (TSWV)*
MARKETS / END USE	Processing, especially drying
POPULATION GUIDE	24 000 – 36 000 final stand per ha
SPECIAL FEATURES	Outstanding disease package, top quality, firm fruit, suitable for drying

* 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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Home of MayFord

GENERAL TIPS FOR TOMATO PRODUCTION

Drying of tomatoes
Legato is one of the varieties that is very well suited for drying, it has a high solid content and also has a intense red colour (Higher lycopene) that produces a very nice end product.

Lycopene
When the fruit reaches the mature green stage rapid changes occur in the fruit. Chlorophyll gradually disappears and at the same time other pigments are created in the fruit, especially lycopene and b carotene. Temperature affect the development of the tomato fruit colour, lycopene which gives the tomato its red colour is not produced at temperatures over 30 ^{o}C. Productions of b carotene however continue up to 40 ^{o}C and this pigment gives the tomato its yellow colour. The best colour development of tomatoes is at the optimum temperature of between 20 – 24 ^{o}C.

Red fruit are less damaged by sunlight, however when green fruit are exposed to sunlight, the damage can be severe and is visible on the green fruit and also when the fruit are ripening and will not develop the intense red colour.

Soil Requirements
In South Africa tomatoes are cultivated on different soil types, from heavy clay to light sandy soil and sandy peat. Tomatoes seem to prefer well-drained sandy soils. Good moisture holding capacity with good drainage is important. Tomatoes grow well at a wide pH range from 5.5 - 7.5 but are sensitive to acid soils and if the pH (H_2O) is lower than 5.5, additional lime should be applied. The lime should be added 4 - 6 weeks before planting.

Bacterial wilt; (*Ralstonia solancearum*)
Symptoms
The plant wilt as a green plant without foliar yellowing, the disease develops at high soil moisture and temperatures between 29 – 35 ^{o}C and can spread through irrigation water.
Prevention and control
Use disease free seedlings, apply crop rotation, weed control, soil fumigation and use resistant varieties.

Mechanical harvest
Legato can be harvested by mechanical equipment when it is intended for processing and has a very good firmness and concentrated fruit set with a very good adaptability and high yield potential of uniform fruit.

Irrigation requirements
Tomatoes require frequent irrigation, as the plants remove a large amount of water, especially under warm conditions. Tomato roots can penetrate the soil up to 1.5 m but seldom more than 60cm deep. Care should be taken to water the soil thoroughly to a depth of about 60cm. Soil type does not affect the amount of total water needed, but does dictate frequency of water application. Lighter soils need more frequent water applications, but less water applied per application.

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.

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.

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).

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