



## OUTSTANDING QUALITIES

- ◆ SUPER SWEET TASTE
- ◆ YEAR-ROUND PRODUCTION
- ◆ EXCELLENT COB QUALITY
- ◆ VERY GOOD SHELF LIFE
- ◆ EXCELLENT TIP FILL

**Orla** is a yellow sh-2 F1 hybrid with outstanding disease resistance. **Orla** has very uniform cobs, straight rows and high pack out. The kernels have high Brix with very good flavour, colour and very good shelf life. Pollination during cooler seasons is very good. The cobs have a very good tip fill, thus reducing waste when pre-packed. **Orla** has intermediate resistance to Common rust (Ps), Northern leaf blight (Et), Southern corn leaf blight (Bm) and Stewart's bacterial wilt (Pst).

## SPECIAL VARIETAL REQUIREMENTS

- May be grown year-round in frost free areas and under overhead irrigation

CHARACTERISTIC*	ORLA
KIND	F1 hybrid sweetcorn ( <i>Zea mays L. var. saccharata Bailey</i> )
TYPE (ENDOSPERM)	sh-2 sweetcorn
MATURITY	70 - 75 days from sowing, depending on climatic conditions
EAR SIZE	Medium
COB SHAPE	Very good, cylindrical
EARS PER PLANT	1.0
COB DIMENSIONS	18 x 4.5 - 5 cm
KERNEL COLOUR	Bright, glossy, uniform yellow
KERNEL ROWING	Excellent, 16 – 18 rows per cob
KERNEL APPEARANCE	Refined and rounded
TIP FILL	Completely filled, slight taper
HUSK COLOUR	Dark green
HUSK PROTECTION	All ears covered, tight
SNAP	Easy
SHANK	Medium
FLAG LEAF	Average length and number
PLANT HEIGHT	1.5 - 1.8 m
PLANT TILLERS	0.5
DISEASE REACTION (SCIENTIFIC)	<b>Intermediate resistance:</b> <i>Puccinia sorghi</i> (Ps), <i>Exserohilum turcicum</i> (Et), <i>Bipolaris maydis</i> (Bm) and <i>Pantoea stewartii</i> (Pst)
PLANT POPULATION	50 000 – 70 000 final stand per ha
USE	Fresh market, pre-packing
SPECIAL FEATURES	Top quality well filled cobs and good shelf life, suited for year-round production

\* 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).

\* **Experimental:** This variety does not appear on the current South African Variety list, but has been submitted for registration.

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



## GENERAL TIPS FOR SWEETCORN PRODUCTION

### Climatic requirements

Sweetcorn requires soil temperatures of between 21 and 27°C for optimal germination; soil temperatures should never be lower than 15°C, although germination is still possible at 13°C. Poor pollination is a result of temperatures above 35°C and/or hot dry winds, under such conditions however, there is an acceleration of developing and ripening.

### Soil requirements and preparation

Sweetcorn can be grown on a wide range of soil types, although the best results are achieved on sandy loam soils. Sweetcorn is moderately tolerant to salts and alkaline soils. The root system (1.2 m deep) of sweetcorn is very sensitive to hardpans, and these must be lifted in order to make nutrients and moisture available to the crop.

By working the soil at the correct soil moisture status, a fine and even seedbed is obtained, a landplane can be used to provide an even seedbed. The uniform emergence of sweetcorn is greatly enhanced by sowing onto fine well-prepared seedbed.

### Plant population

Sweetcorn seed, particularly sh-2, is easily damaged during handling or planting, therefore air planters should rather be used than plate or finger type planters.

The seed is planted in moist soils at a depth of 20 - 25 mm, shallow planting can result in problems, as the topsoil layer dries out increasing field mortality. Light irrigations at regular intervals are beneficial for germination, care should be taken to avoid over-irrigation. Sh-2 hybrids are particularly sensitive to poor irrigation practices during germination.

The average population is 50 000 - 55 000 plants per hectare, although certain varieties perform better under higher populations, and lower populations are better suited to winter production in frost-free areas. Percentage germ should also be taken into account when calculating sowing rates in kilograms.

Between row spacing is determined by production practices and implements and may vary from 70 - 100 cm.

### 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.

### Different Sweetcorn endosperm type

Gene	Sugary (standard)	Sugar Enhanced	Shrunken 2
Common name	standard	modified sugary E.H.	supersweet ultrasweet
Symbol	su <sub>1</sub>	se	sh <sub>2</sub>
Isolation	maize	maize	maize, se, su
Sugar content	high (twice maize)	higher	highest (twice su <sub>1</sub> )
Pericarp (skin of kernel)	tender	extremely tender	crunchy
Texture	creamy	milky creamy	watery
Starch content	normal	normal	low
Seeds	normal	normal	wrinkled
Germination	good	good	fair
Keeping quality	poor (1-3 days)	fair (3-5 days)	good (5 -10+ days)

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