



OUTSTANDING QUALITIES

- ◆ WINTER SOWING SLOT
- ◆ SLOW TO BOLT
- ◆ EXCEPTIONAL UNIFORMITY
- ◆ EXCELLENT HOLDING ABILITY


Matador is a cabbage variety from the Sakata range specifically selected for winter production. The round heads weigh between 3 and 5 kg on average with excellent density. Depending on the winter temperature, **Matador** can take 90 - 120 days to mature after transplant. The frame is large resulting in excellent protection from cold and wind. **Matador** has been trialed in most production areas and the seedlings have proven to be vigorous and tend to handle cold weather better than most other varieties in the same time slot. The shape of the head changes with time and may be seen to be pointed earlier in its growth stage, becoming very round as the cabbage head matures.

SPECIAL VARIETAL REQUIREMENTS

- Do not irrigate during cold nights or let the cabbages go into the night with wet roots; the heads could crack if night temperature drops very low during the night and warms up quickly during the day
- Do not plant this variety in the summer or spring when the rainfall is high and Black rot is likely to occur
- Contact area representative for a sowing guide and more technical information

CHARACTERISTIC	MATADOR
TYPE	F1 hybrid fresh market cabbage (<i>Brassica oleracea</i> L. convar. <i>Capitata</i> (L.) Alef. Var. <i>capitata</i> (L.) Alef.
MATURITY	Medium to late (winter 90 - 120 days)
HEAD SIZE	Large
HEAD SHAPE	Round
HEAD WEIGHT	3.0 - 5.0 kg (could be bigger depending on spacing)
HEAD COVER	Very good
EXTERIOR COLOUR	Blue-green
INTERIOR COLOUR	Yellow light green
FLAVOUR	Good
PLANT SIZE	Large
PLANT HABIT	Semi-erect
BOLTING REACTION	Slow (check for temperature fluctuation in the winter)
DISEASE REACTION (SCIENTIFIC)	-
FIELD HOLDING	Very good
YIELD POTENTIAL	Excellent
SUGGESTED POPULATION	28 000 - 35 000 plants per ha
USE	Sold as individual heads and per bag
SPECIAL FEATURES	Suitable for late autumn to early winter sowing

* 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.

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GENERAL TIPS FOR CABBAGE PRODUCTION

Plant establishment

Seedlings (not older than 4 to 6 weeks in summer and 6 to 8 weeks in winter) should be grown in a medium which is well aerated, has a good water holding capacity and should have a pH of about 6.5. Peat, bark and vermiculite mixes are generally used. Typical media problems include excessive tannins, low air-filled porosity resulting in poor drainage and green mould build-up. The medium should be pre-enriched and seedlings should be fertilized. Germination occurs best when the seedling trays are in a germination chamber running at 20°C and with high humidity. At the first sign of germination, the seedlings should be moved out onto the racks of the tunnel. Seedlings should ideally be grown at a temperature of 20°C.

Plant spacing

Spacing and plant populations are extremely important as they affect the final product, especially size in cabbage. Wider spacing may be necessary under specific environmental conditions and will aid in producing a quality final product. Wider spacing is required as the climate becomes hotter and more humid to prevent the increased chance of disease. This is also the case where there is a possibility of drought and should be practised on heavy soils.

Table showing suggested plant populations of cabbage:

Type	Size	Plant population (plants/ha)
Cabbage	Large	28 000 – 35 000
	Medium	55 000 – 65 000
	Small (Baby)	80 000 – 100 000

Fertilisation

Brassica crops have a high nutritional requirement with the main factors limiting yield in many areas of South Africa being soil acidity, low soil phosphorous, low soil nitrogen and potassium levels as well as low or unavailable molybdenum. A good nutritional programme is essential to maintain high nutrient levels in the soil with annual applications based on a reliable soil test. Soil tests should be conducted for each field prior to planting to record the status of the soil and to be able to correct any nutrient imbalances and problems prior to planting. Applying small amounts of fertiliser through the life of the crop is more beneficial, cost-effective and results in good quality produce.

Cracking of cabbage

Symptoms

- The cabbage head bursts open
- Often seen as cracking on the head surface

Causes

- The natural effect that occurs in cabbage once the cabbage has hardened but continues to expand
- Hot temperatures, excess water, high humidity and warm soils all favour bursting.
- Early varieties are more inclined to burst than late varieties
- Some varieties are more susceptible to bursting than others

Control

- Plant varieties which are resistant to bursting, especially during summer production
- Grandslam, Superlam and Conquistador all have good resistance to bursting

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 with 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.

Shape when young:

Even though Matador has a very attractive round shape at harvest, it does have a "pointy" shape during head formation. As with most winter cabbages, Matador grows in length and then fills up its head. This is to make sure that the growing point is protected against the cold that the winter brings. This does not mean that the cabbage is bolting – it is just the way this variety develops. Remember that in extreme cold, cabbages can take up to 140 days to mature.



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