

CHARMANT

F1 Hybrid Cabbage

OUTSTANDING QUALITIES

- ◆ EXCELLENT BABY AND MEDIUM SIZED CABBAGE
- ◆ VERY SLOW TO BOLT
- ◆ EXCELLENT FIELD HOLDING ABILITY
- ◆ SWEET TASTE
- ◆ WELL PROTECTED HEADS

Charmant is well adapted to the different cabbage production areas of South Africa and has an excellent yield and field holding ability. The blue-green leaves form a large frame offering very good protection to the head. Heads can weigh from 0.5 to 1.5 kg if left on the field under normal conditions. **Charmant** can be used for the pre-packed supermarket, processing and export. **Charmant** has intermediate resistance to Fusarium yellows (Foc).



SPECIAL VARIETAL REQUIREMENTS

- We recommend planting on raised beds or ridges in the warm season
- Heads are ready for harvest when the youngest leaf covering the head curls over, see photograph above
- Suited to sowing throughout the year in areas with mild winters. Avoid sowing in April and May in areas with severe frost
- Contact the area representative for a sowing guide

CHARACTERISTIC*	CHARMANT
TYPE	F1 hybrid 'baby' cabbage (<i>Brassica oleracea</i> L. convar. <i>Capitata</i> (L) Alef. var. <i>Capitata</i> (L) Alef.)
MATURITY	Early (warm season: around 55 - 65 days (baby) and 60 – 70 days (medium heads), cool season: 60 - 70 days (baby) and 70 – 80 days from transplanting (medium heads)
HEAD SIZE	Small to medium depending on spacing
HEAD SHAPE	Round
HEAD WEIGHT	0.5 - 1.5 kg (could be bigger depending on spacing)
HEAD COVER	Very good
EXTERIOR COLOUR	Blue-green
INTERIOR COLOUR	Yellow light green
FLAVOUR	Very good
PLANT SIZE	Small
PLANT HABIT	Erect
BOLTING REACTION	Very slow to bolt
DISEASE REACTION (SCIENTIFIC)	Intermediate resistance: <i>Fusarium oxysporum</i> f. sp. <i>conglutinans</i> (Foc)
FIELD HOLDING	Excellent
YIELD POTENTIAL	Very good
SUGGESTED POPULATION	Baby heads: 60 000 - 80 000 plants per ha Medium heads: 40 000 – 60 000 plants per ha
USE	Novelty, pre-packed and sold as individual heads on fresh market
SPECIAL FEATURES	'Baby' and medium pre-pack supermarket cabbage, excellent field holding ability and sweet taste

* 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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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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GENERAL TIPS FOR CABBAGE PRODUCTION

Baby cabbage marketing

The 'baby' cabbage market is very large in many parts of the world and is growing in importance in South Africa. Many retail outlets demand small cabbages of about 500 g, which are usually placed on a punnet and sold in pairs. Slightly larger cabbages of up to 1.5 kg are also common in retail stores where they are wrapped in plastic film and sold individually. Cabbage supplied to such a market must meet the quality specifications of the retail outlet and have an attractive appearance. Round shape, good colour, taste and shelf life are all extremely important and will result in a premium price for produce. Retail markets are an attractive option as they offer a fixed price for quality product and require a constant supply ensuring that the grower can always sell his crop.

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 increased chance of disease. When producing 'baby' cabbage it is important that the spacing is not too wide as the heads will become larger and valuable production space is lost. We suggest plant populations of 80 000 – 100 000 plants per ha.

Table showing suggested plant populations of 'Baby' Cabbage crops

Type	Size	Plant population (plants/ha)
Cabbage	Small (Baby)	60 000 – 80 000
	Medium	55 000 – 65 000

Plant establishment

Seedlings (not older than 4 to 6 weeks for summer and 6 to 8 weeks for winter) should be watered prior to planting and should be transplanted into a pre-wetted moist soil. Ensure that the seedling roots point straight down and are not bent during the process otherwise plants will be stunted and may not produce heads. Planting out on raised beds or ridges is advisable in wet areas to reduce the risk of water logging and stem or root rots. The beds are usually about 1 m wide and of any convenient length. The beds are usually raised about 150 mm above the ground with access pathways between that will also enable drainage.

Transplanting

In summer, 4 week old seedlings are ideal, whilst in winter this may have to stretch to 8 weeks. A good norm to use is to transplant after the development of the first true leaf. Hardening off is especially necessary when the plants are to be planted out during warm conditions.

Seedlings should be carefully inspected before transplanting into the field. Check that the terminal bud is not damaged as these results in blind unproductive plants that should be discarded. It is also important that seedlings are carefully planted with the roots pointing downwards to avoid 'jay' rooting problems. The ideal seedling should be healthy, have no more than 3 true leaves, be 125 mm to 150 mm tall, have a straight stocky stem and not be root bound to the cell.

Post-harvest handling

Cabbage has a good shelf life and can be stored for relatively long periods of time under ambient conditions. This produce should ideally be stored at low temperatures where water loss and disease can be managed. Under these conditions the shelf life can be extended further allowing for transport to further markets and greater market flexibility.

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.

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