



## OUTSTANDING QUALITIES

- **EARLY MATURITY**
- **GOOD UNIFORMITY**
- **VIGOROUS, RAPID REGROWTH**
- **EXCELLENT BOLTING TOLERANCE**

**TOP BUNCH** F1 hybrid collard is an early maturing variety with wavy, slightly savoyed leaves and good uniformity. Plants are vigorous with rapid regrowth after harvest, supporting multiple cuts and high yield potential. The variety is well suited to cool season production, offers excellent field holding ability and maintains quality due to high bolting tolerance. **TOP BUNCH** is suitable for fresh market, processing and baby leaf production.

## SPECIAL VARIETAL REQUIREMENTS

- **TOP BUNCH** should only be grown in the cool season
- Contact your area representative for more information

| CHARACTERISTIC*               | TOP BUNCH                                                              |
|-------------------------------|------------------------------------------------------------------------|
| KIND                          | F1 Hybrid Collard ( <i>Brassica oleracea</i> L. var. <i>acephala</i> ) |
| PRODUCTION TYPE               | Open field                                                             |
| MATURITY                      | Medium-early, around 65-75 days from transplant                        |
| SEASON                        | Cool season                                                            |
| LEAF SIZE                     | Large                                                                  |
| LEAF SHAPE                    | Oval, slightly wavy savoyed                                            |
| COLOUR                        | Dark blue-green                                                        |
| REGROWTH                      | Excellent                                                              |
| UNIFORMITY                    | Very good                                                              |
| PLANT SIZE                    | Large                                                                  |
| DISEASE REACTION (SCIENTIFIC) |                                                                        |
| FIELD HOLDING                 | Excellent                                                              |
| YIELD POTENTIAL               | Exceptionally high yield potential                                     |
| MARKETS / END USE             | Pre-pack, processing and fresh market                                  |
| SUGGESTED SPACING             | 25 000 – 30 000 plants/ha                                              |
| SPECIAL FEATURES              | High bolting tolerance and excellent regrowth                          |

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

**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 COLLARD PRODUCTION

### 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 definition:

Susceptibility (S) is the inability of a plant variety to restrict the growth and development of a specified pest or pathogen.

### Tolerance definition:

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.

### Climatic requirements

Collards (*Brassica oleracea* var. *acephala*) grow best in cool, moist conditions, where they produce tender, high-quality leaves and maintain strong vegetative growth. Under high temperatures, collards may experience several stress-related physiological problems, including leaf bitterness, reduced leaf expansion and a greater tendency toward premature bolting, especially in sensitive cultivars. Heat stress can also reduce overall plant vigour and leaf quality, as nutrient uptake becomes less efficient and water demand increases. Varietal selection is therefore critical for warm-season production; some hybrid varieties demonstrate improved tolerance to heat and maintain better leaf texture, colour and regrowth during warmer months. Choosing these more resilient varieties helps ensure reliable performance and consistent leaf quality when collards are grown outside their preferred cool-season environment.

### Fertilisation

Collard crops generally have a high nutritional requirement with the main factors limiting yield in many areas of Southern 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. Incorporation of organic matter greatly benefits the growth and development of collard.

### Harvesting

TOP BUNCH typically reach maturity between 65 and 75 days after transplanting. Because new leaves expand continuously, the crop should be harvested every two to three days to maintain optimal quality. Leaves are picked when they are fully sized, well-coloured and tender, but before any signs of pest, disease or mechanical damage appear.

Although collards do not form compact heads, leaf quality deteriorates rapidly after harvest, especially under high temperatures, as wilting and yellowing occur more quickly. Timely harvesting is therefore essential to preserve the ideal texture, colour and market value. Wider spacing generally produces larger individual plants and leaves, whereas closer spacing results in smaller leaves but higher total yields, as more marketable foliage is produced per unit area.

Under good management conditions, commercial collard yields commonly range between 6 and 8 tons per hectare, depending on cultivar performance, spacing, fertility and environmental conditions.

### Post-harvest handling

Collard greens should be rapidly cooled after harvest and stored at approximately 0 - 4 °C, as low temperatures help maintain leaf firmness, colour, and overall quality. Like other leafy greens, collards have a high respiration rate, so it is essential to remove field heat quickly and maintain a continuous cold chain from harvest through storage, transport and display. Any break in the cold chain accelerates post-harvest decay, yellowing, and wilting, reducing marketable quality. Collards keep best at 90 - 95% relative humidity, which reduces moisture loss and prevents rapid wilting, shrinkage and weight loss - key factors affecting both appearance and final yield.

**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.

