

TAINA

Crisp Head Lettuce

OUTSTANDING QUALITIES

- ◆ ADAPTED TO SUB-TROPICAL AREAS
- ◆ GLOSSY GREEN LEAVES
- ◆ SLOW TO BOLT
- ◆ WARM SEASON PRODUCTION

Taina is a crisp head lettuce that is particularly suited for warm season production. **Taina** has a maturity of 60 to 65 days from transplant. Plants are uniform, vigorous with good butt cover. **Taina** produces heads that are medium-large, firm and have a medium dark green colour. **Taina** is slow to bolt.



SPECIAL VARIETAL REQUIREMENTS

- Excellent results are normally achieved for harvest through the warm season
- Contact area representative for a sowing guide

CHARACTERISTIC*	TAINA
KIND	Lettuce (<i>Lactuca sativa</i> L. var. <i>capitata</i>)
TYPE	Crisp head/Iceberg
MATURITY	Approximately 60 – 65 days from transplant to harvest
SEASON	Warm season production
HEAD SIZE	Medium-large
HEAD COLOUR	Medium dark green
BUTT CORE	Medium
HEAD SOLIDITY	Very good
BOLTING REACTION	Slow
UNIFORMITY	Very good
LEAF COVER	Fair to good
MARKETS / END USE	Fresh market, punneting & home garden
POPULATION GUIDE	Hydroponic production: 80 000 – 100 000 plants final stand per ha (30 cm in row, 30 cm between rows) Open field production: 45 000 – 80 000 plants final stand per ha (30 cm in row, 60 cm between rows)
SPECIAL FEATURES	Warm season production. Very solid head, early maturing, slow to bolt

* 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).

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GENERAL TIPS FOR LETTUCE PRODUCTION

Crisp head or Iceberg lettuce (*Lactuca sativa* L. var. *capitata*) description

Crisp head is the principal lettuce type grown in South Africa. It must have a large, firm head with intact outer leaves. About three-quarters of the outer leaves are removed before packing. There are also pre-pack markets where the smaller heads are wrapped separately. The leaves are usually broader than they are long and the outside leaves are dark green with either a dull or bright cast. Inner foliage is either whitish or creamy yellow. The heads are firm to hard with a crisp texture. The taste is usually mild. Choose a cultivar that produces a solid heart and that is easy to handle.

Disease reaction definitions:

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.

Immunity (I): Not subject to attack or infection by a specified pest or pathogen.

Bolting of lettuce

Bolting refers to the plant flowering and producing seed prematurely. In a lettuce crop this would result in the produce being unmarketable. The following factors can cause bolting of lettuce:

- Wrong sowing time
- Cold temperatures, especially below 7 °C
- Excessive fertilisation of seedlings
- Cold grown seedlings
- Oversized seedlings at transplant
- Difference in temperatures between seedling nursery and farm
- Stress caused by heat, drought, water logging and disease
- Diurnal temperature swings

Transplanting

In summer, 4 week old seedlings are ideal, whilst in winter this may have to stretch to 7 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 this result in non-heading plants that should be discarded. The ideal seedling should be healthy and not be root bound to the cell.

Climatic requirements

Lettuce is a cool weather crop and is not generally severely affected by winter colds and light frost, although cultivars differ in their susceptibility to cold. Heavy frost before harvesting will, however, damage head and leaves. If not marketed immediately the heads will become black and of no use. Where the climate is moderate, lettuces can be cultivated throughout the year. The optimum temperatures for lettuce are 17 - 27 °C during the day and 3 - 12 °C at night. If night temperatures fall below 3 °C, the growth rate will be retarded. If high temperatures of 28 °C and above prevail, most cultivars will form small, inferior, loose heads and will bolt to form seed stalks and leaves with a bitter taste. High temperature can also cause a high incidence of Tip burn, which is a physiological disorder.

Harvesting and packing

Crisp head lettuce is harvested when the heads have developed sufficiently (800 – 900 g) while loose leaf types are harvested when leaves are ready for use. Under optimal conditions maturity would be between 28 - 32 days from transplanting with a strong bitter taste developing if this is delayed. Lettuce heads are harvested by cutting the stem just above the level of the growing medium with a long sharp knife. The heads are placed in tote bins or crates and are taken to the packing shed as soon as possible. As lettuce wilts quickly, harvesting should be done as early in the morning as possible. The outer leaves are cut off and the heads packed in crates, plastic bags or wrapped in film. Polyethylene film is mostly used, but new PVC-film is easier to wrap, maintains freshness and looks neater. If lettuces are not pre-packed, they are usually packed in cardboard boxes or crates of about 10 kg.

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