

VERA

Green Leaf Lettuce

OUTSTANDING QUALITIES

- ◆ **WIDELY ADAPTED**
- ◆ **ATTRACTIVE, GLOSSY GREEN LEAVES**
- ◆ **VERY GOOD UNIFORMITY**
- ◆ **SLOW TO BOLT**

Vera is a widely adapted leaf lettuce ideally suited for year round production. This vigorous variety forms a very attractive rosette of medium green leaves. It grows fast to a medium-large sized head in approximately 60 to 65 days after transplant. **Vera** has good heat and cold tolerance and is slow to bolt.



SPECIAL VARIETAL REQUIREMENTS

- Widely adapted, except for extreme heat or cold conditions
- Contact area representative for a sowing guide

CHARACTERISTIC*	VERA
KIND	Lettuce (<i>Lactuca sativa</i> L.)
TYPE	Green leaf lettuce
MATURITY	Early, approximately 60 – 65 days from transplant to harvest
SEASON	All year round, except under extreme heat or cold conditions
HEAD SIZE	Medium-large
HEAD COLOUR	Medium green
BUTT CORE	Medium
HEAD SOLIDITY	Poor to fair
BOLTING REACTION	Slow
UNIFORMITY	Very good
LEAF COVER	Good
MARKETS / END USE	Hydroponics, novelty & 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: 70 000 – 80 000 plants final stand per ha (30 cm in row, 60 cm between rows)
SPECIAL FEATURES	Early maturing, widely adapted, except under extreme cold and hot conditions

* 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

Leaf lettuce (*Lactuca sativa*. L.) description

Leaf lettuce varies in size and colour, with leaves characteristically forming a bunch, or rosette. Leaves can be long or broad, round, spatulate or lobed, frilled, smooth dark or light green and with, or without, a red colour. Because of its open growth habit, leaf lettuce has fewer bleached leaves than the crisp types. Leaf lettuce has a higher vitamin and mineral content than crisp lettuce and because the leaves are more exposed to sunlight, a much higher proportion of green leaves are found.

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.

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

Mixes for pillow packing

This trend is developing all over the world and is expected to become increasingly popular. Mesclun mixed greens are packed in plastic bags that are inflated and sealed to create a pillow. Mesclun is the term for fresh, tender greens combined for their textures, flavours and colours grown and

marketed together. Pillow packing ingredients includes half a dozen, or more, of any of the following lettuces as well as other crops: Crisp head, butter head, cos, leaf, red leaf and other lettuces mixed with other crops such as endive, sorrel, spinach, parsley, watercress, chives, garlic chives, fennel, chicory, baby corn, mustard, spring onion and blossoms (pak choi, borage and violets).

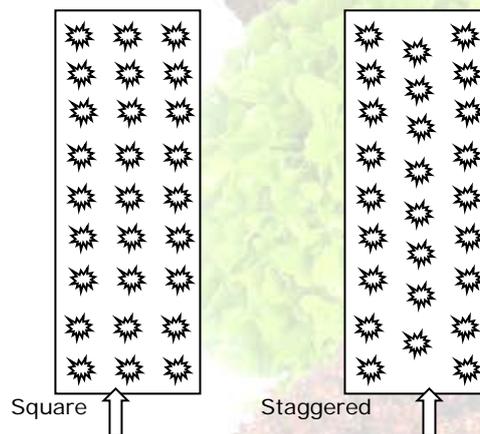
Seedling production

Seedlings must be strong, uniform and healthy. A weak seedling never grows into a strong, productive plant. Seed trays with 200 holes are generally used for lettuce. Seed require light and temperatures of around 24 °C to germinate. Germination is poor at temperatures above 27 °C. Seedlings will be ready for transplanting in 3.5 – 4 weeks if the temperature is optimal or 5 – 6 weeks under cool conditions.

Spacing and plant population in Gravel Flow Technique systems

Lettuce spacing depends very much on the hydroponic system used, type of lettuce grown, variety as well as the specific climatic conditions. Certain crisp head varieties will produce smaller pre-pack heads whereby other varieties can produce very large heads. Because of these reasons it is difficult to give the exact spacing of lettuce. Lettuce seedlings can be planted in either a square or staggered formation as illustrated below:

Planting method



Many lettuce varieties can be spaced at approximately 30 x 30 cm spacing within for instance gravel beds. That would result in approximately 90 plants in a bed of 1 m wide and 10 m long. This would probably differ from variety to variety. Usually the plant population in hydroponic systems is higher than with open field lettuce production.

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