

## ***Limonium sinensis China*<sup>®</sup>**

### **Cultivation description**

#### **General**

In general *Limonium sinensis* are cold needy species. The *China*<sup>®</sup>-serie is much less susceptible to this. They form a rosettelike plant with lanceolate leaves.

*Limonium sinensis China*<sup>®</sup>-serie has special value in flower arrangements. It is somewhat susceptible to breaking. High production of about 10 flowering branches during the first cut. An additional advantage here is that *Limonium sinensis China*<sup>®</sup>-serie has a pleasant sweet scent.

#### **Preparation**

Virtually each type of soil is suitable for cultivating *Limonium sinensis China*<sup>®</sup>-serie, provided it is sufficiently aerated and permeable. Good drainage is important (use drainage). We advise disinfecting the soil beforehand by steaming it. Covering the plant bed with plastic has the advantage that soaking the soil is avoided and not only that the threat from weeds is kept low. The plant bed is often gone over with a spit cultivator before planting. Working the soil to a depth of 30 cm is usually sufficient.

#### **Planting**

In the west European climate zone we advise planting from January onwards in the glasshouse and from April outside. One can plant throughout the year in the (sub) tropical climate zone. We advise you to plant every two weeks to ensure regular harvesting. When cultivated outside without any form of heating, the plants will flower in June/July.

Glasshouse cultivation: December – February

Cultivation outside: mid April – end May

*Limonium sinensis China*<sup>®</sup>-serie is planted on 1 metre wide beds, 2 rows per bed, 40 cm between rows. The width of the path between the beds is mostly kept to 45 cm.

Net: 5-6 pl./m<sup>2</sup> meaning 2,5-3 pl./m<sup>2</sup> gross.

Planting more closely can lead to flowering branches being too thin. Not only that the threat of *Botrytis* increases.

#### **Supporting material**

*Limonium sinensis China*<sup>®</sup>-serie requires supporting material for cultivation inside as well as outside. In most cases, one layer of 17.5 x 20 cm *Alstroemeria* wire netting is sufficient. Placing three wires (one on each side of the bed and one in the middle) works equally well. It is important to keep the supporting material as low as possible

for ease of harvesting.

### Temperature

Limonium sinensis China<sup>®</sup>-serie is a crop that has very low heating requirements. Straight after receipt maintain a temperature of 13 / 14 °C. When the plant has taken (after 2-3 weeks) the temperature can be reduced to 9 - 10 °C (D / N).

In the spring and the autumn one has to heat/ventilate more often in order to keep the relative humidity under control (<80%) rather than the temperature. It is advisable to ventilate both during the day and at night to avoid high relative humidity. To keep the crop growing the night temperature must not drop below 9 °C . When the light intensity increases from March onwards one can best maintain the temperature at 15 / 17 °C during the day.

Too high a temperature at night (>16 °C), combined with low light levels, causes more vigorous vegetative growth at the cost of flowering.

The temperature may rise proportionally with the increasing light intensity. During the flowering period in the autumn, a blast of warmth before sunrise, prevents Botrytis infections.

### Fertiliser

The fertiliser application is dependant upon the nutritional status of the soil. We therefore advise you to carry out a soil analysis before applying fertilisers. If the nutritional status of the soil is good, you do not have to apply fertilisers for the first four weeks.

In general Limonium sinensis China<sup>®</sup>-serie must be cultivated more dryly. On too rich a soil the quality is less because the flowering branch becomes limper.

One can apply 3-5 kg N+P+K 12+10+18 per 100 m<sup>2</sup> as supply dressing.

Limonium sinensis China<sup>®</sup>-serie mainly needs fertilisers biased towards potassium nitrate and magnesium in the vegetative stage. During the generative stage the emphasis lies on potassium and phosphorous containing fertilisers.

Target values (Full ground) Limonium cultivation.

mmol/l

EC 0,8 – 1,2

pH 6,2 – 6,5

NH <sub>4</sub> <sup>+</sup>	K <sup>+</sup>	Na <sup>+</sup>	Ca <sub>2</sub> <sup>+</sup>	Mg <sub>2</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>-</sup>	HCO <sub>3</sub> <sup>-</sup>	H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>
0,1	1,3	1,6	1,5	1,0	2,5	1,4	1,5	0,5	0,15

The ideal pH lies around 6.4, depending upon the soil. The pH can be increased by chalk fertilisers such as carbonated agricultural chalk and carbonated magnesium chalk.

### Watering

In the vegetative stage one can give water from above via rain piping. It is important to apply water from underneath (irrigation membranes, drip irrigation) during the

generative stage.

Watering in the mornings prevents the crop entering the night wet.

Rain piping underneath the crop causes uneven distribution and is therefore not recommended.

### **Topping**

The first flower branches will be visible after about two months (1 month when cultivated in the open). This first flower branch should be topped in order to get good production first.

Should the plants be planted too close to one another, then the lowest stems and branches will not develop any flowers due to lack of light.

### **Harvesting**

On harvesting the flowers should be ripened sufficiently, i.e. when they are two thirds open. The flower stems absorb water well. Limonium sinensis China<sup>®</sup>-serie begin to flower about 4 months after planting. Flowering continues regularly. Except for topping and getting ready for auction, cultivation is work-friendly. If one cuts at too raw a stage the flowering branch goes limp. We advise cutting with shears in preference to cutting with knives. You can harvest about 20 branches per plant per year.

If one delivers Limonium sinensis China<sup>®</sup>-serie in water one must pre-treat it, e.g. Chloorpil or Prima Fleur Zomerbloemen. They are sorted according to length and weight.

We advise you not to put the flowers in a cooling cell after harvesting.

### **Crop protection**

Limonium sinensis China<sup>®</sup>-serie is sensitive to the following products: Eupareen Smitkorrels; Ronilan (chance of retarding growth). The amounts of pesticides to be used are given in g. or ml. per 100 l. water.

#### Botrytis

A grey brown, powdery fluff of mould appears on dead spots. In damper conditions more fluff is produced. The whole plant can be infected with Botrytis. Botrytis is an aggressive weak parasite. During the cultivation infection of the leaves and small flower heads occurs. The latter bend over. Infecting the plant base can cause plant loss.

#### Mould (Erysiphe limonii)

Rhizoctonia

#### Aphids

#### Caterpillars

#### Slugs

#### Red spider mites

#### Thrips

**More information:**

Van Zanten Plants B.V.  
Lavendelweg 15, Rijsenhout  
P.O. Box 265, 1430 AG Aalsmeer  
The Netherlands  
Telephone +31 (0)297 38 70 00  
Fax +31 (0)297 38 70 70  
plants@royalvanzanten.com  
[www.royalvanzanten.com](http://www.royalvanzanten.com)

This cultivation description is of a general nature. Van Zanten Plants is therefore not responsible for any damage arising from the advice given in this cultivation description.