Kiwi *Dianthus barbatus* **Technical Guide**

Artulut





Kiwis are a lovely variety of the Dianthus species. Having stems of 70 to 90 cm high (27-35 inches), with a 8-11 cm (3-4.33 inches) head flower diameter.

It has a production cycle of 10 to 12 weeks (under tropical conditions) and up to 14 weeks in Northern hemisphere conditions. It can vary according to weather conditions, and sowing latitude. It grows better in deep, organically rich and well drained soils; the hydroponic alternative is a very viable one.

Production

Planting density: 20 to 24 plants per square meter (about 11 sq. ft). Rich well drained, with good aeration, not much humidity, and a PH between 5.8 and 6.5 organic soils are required.

Hydroponic farming is also possible as long as there is an appropriate use and quality of the substrate used, and a well management.

It is in this first stage that the plant presents a higher demand on nitrogen, thus, it is recommended to do applications of calcium nitrate CN (NO3) 2 per 200 ppm. Stringing of 2 to 3 beds should be used to guide the stems along the growth of the plant.

Between week 6-7 and/or after reaching a height of 10 cm (4 inches) or 8 pairs of leaves well developed, the pinch should be done on the third internode or 3 pairs of leaves removing the apical growth meristem. To obtain better results and better quality; it is important to make a selection leaving 5 to 7 *(depending on the quality and market)* stems on the plant. Pinching and selecting will yield 3-5 stems per plant.

Alternative production option: If not pinching, a good quality one-stem per plant crop will develop.



Distribution planting



Kiwi Mellow Production





Fertilization

The *Dianthus Barbatus* specie has an extremely high demand of nitrogen in the first fenologic stage; nevertheless an excess of nitrogen means more sensitivity to disease and an increase of shoots. Nitrogen applications should be done twice per week at a dosage of 180 to 220ppm based on nitrates.

At the first stages of growth, Phosphorus is also important, it increases the growth of the stem and roots. Ammonium phosphate is also recommended to add N (18-46-0)

To enhance the aspect of the Dianthus and to increase the vigor of the plant, Potassium is recommended at a dosage of 22 ppm.

Boron, essential for normal plant growth, promotes appropriate cell division, cell elongation, cellular wall strength, pollination and flowering. The frequency of application should be watched since it is a very residual element. Dosage 1.5-2.0 ppm



Grown plants:

Apply fertilizer based on calcium at 100 ppm, once or twice per week. *Dianthus Barbatus* plants require an adequate amount of calcium in the fertilization program.

Plants which have just formed their roots:

Apply an average of K in a 200 ppm dosage, it should be applied through irrigation. A good level of potassium should enhance the aspect and vigor of the plant.



Most required micronutrients by *Dianthus Barbatus* are: **iron**, **zinc**, **copper**, **magnesium**, **molybdenum**, **and boron**. In case they are needed, they should be applied via leaf, taking advantage of any phytosanitary at approximately 80 ppm.







Cultural Recommendation

Preventive programs such as:



Fusarium

(Fusarium oxysporum F. sp. Dianthi) Produces important damage that goes up from the bottom to the top, it is usually located close to the stem base. At the beginning roots remain intact, but later on the rot, causing the neck to break as the plant is removed, leaving part of the roots in the soil. It is controlled with irrigation, by watering the plant base extremely well, with fungicide solved or sprayed.

O _{Mir}

Miners

(psedonapomyza dianthicola) its larvae form leaf mines in the leaves, producing weakness and commercial depreciation of the dianthus. They can also be controlled by applying different systematic pesticides.

Thrips

(Frankliniella occidentalis) because of tiny size, they enter the flower buds easily, they feed (from petals and pollen) triggering discolorations in the edges of the petals. They can be controlled by applying different systematic pesticides.

"The information contained in this document provides general guidelines crop without a prescription, so if recommends make adjust-ments necessary according to climatic con-ditions, characteristics and practices of each farm."



Order at ballseed.com/webtrack

Talk to us. Ball Seed: 800 879-BALL Ball ColorLink: 800 686-7380