Ornamental Brassica Production



Brassica oleracea are gaining popularity in the cut flower trade where the single stems of specially bred cultivars are of interest as 'fillers' in mixed flower bouquets.

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SITE

The crop can be grown outdoor or under a protected structure – cold glass, standard tunnel or Spanish tunnel.

SOIL & PH

The soil must be deep and well drained. Will grow on a wide range of soil types and the must be 6.5 – 7.0.

SYSTEM

The crop is generally grown on the flat but can be grown on slightly raised beds.

SEASON

There is demand all year round with continuity being achieved by growing crops both under protection and out of doors and by varying the time of sowing/planting. Experimental work in Teagasc suggests that by planting from mid June (out of doors) to early/mid August (under protection) continuity of cropping from late September to end January can be achieved.

SEED & CULTIVARS

Plant material in the Teagasc trials was sourced form Florensis BV. The main cultivars grown are those from the 'Crane' series – Crane Red, White & Rose being the most popular.

NUTRITION

A soil test is necessary to accurately determine rates of Phophorus and Potash. The species will respond to the use of nitrogen when up to 100 kg/ha can be applied depending on previous crop history.

PLANTS

While the crop can be direct drilled, Teagasc work focused on using transplants where plants are generally raised from seed sown in modules during April/May.

PLANTING

Plants are planted in single rows at 80/m². This gives an overall plant density of approximately 650,000 plants per ha leaving space at intervals to facilitate management and harvesting operations. Heads grow larger when planted further apart.

It is recommended to plant a double row at the outsides so that they do not get oversized. When planted too close, plants will not develop properly. Be careful to set the plants so that they will grow straight up. If plants fall over, they will produce curved stems, making them unsuitable for cut flower use.

A wire mesh is used to give support to the crop as it grows. This is put in place at planting and raised up as the plants grow with the aid of specially adapted poles.



Layout with wire and pole support structure in a crop.

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WEEDS

It is important to keep the crop free of annual weeds. Productssuchas*Metazachlor*(ButisanS)&*Pendimethalin* (Stomp Aqua) have label recommendations for overall application in an outdoor crop and should be sprayed immediately on planting. There are no approvals for use on protected crops, therefore the soil must be sterilised prior to planting.

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PESTS

The normal pests of brassicas must be monitored for including: cabbage root fly, aphids & caterpillars. Insecticide treatments are justified during the growing season. Contact Teagasc for up to date recommendations on plant protection products.

Slugs – can be a threat. Rabbits and pigeons could also pose a threat to quality production in an outdoor crop.

DISEASES

The main diseases to look out for include downy mildew, ring spot & alternaria. A fungicide programme must be implemented and regular spraying is justified.



Plants with Downy Mildew symptoms which can be a serious threat to quality of ornamental brassicas.

GROWING ON

The crop should be well watered and fertilised in the first 3 to 4 weeks of growth so that adequate stem length is attained. The heads begin to colour when night temperatures drop below 15°C in the Autumn. The plants need 5-6 days of cold nights to change color.



Outdoor crop getting close to harvest

HARVEST

When the top of the stems have coloured up to the desirable tone, good quality un-blemished stems, at least 55 cm in length are carefully selected and cut using a hand held secateurs. Grading and bunching is generally carried out in the packing shed. The lower leaves are removed and stems are tied neatly with a rubber band in bunches of 5 and then stood in water overnight and kept cool prior to packing or further transport in buckets on Danish Trolleys.



COSTS & RETURNS

A net return of $\notin 4/m^2$ is achievable from a single crop under protection in a standard tunnel structure given a 60% grade out. It is assumed that a structure is already in place. The cost of the support poles and netting is not included which is estimated at $\notin 1.70/m^2$.



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