

## Peonies for Cut flower

### Cultivation information Peonies for cut flower

Herewith we would like to offer you our assortment of Peonies for cut flower production. We invested many years in this new and improved assortment of Peonies. We can supply new and improved varieties as well as the older varieties in good quantity. We grow all of our Peonies in Holland on sandy soil on a two-years growing cycle. This way we make sure you get healthy, fresh stock which produces a good crop of peonies. Besides Peonies for cut we also supply Peonies for pot. We have a specific assortment for this market. In the end of May to early June are our peony fields a beautiful sight of flowers and varieties. Make appointment with us and view all these wonderful colours and types. Here we have planted our whole assortment and compare blooming time and varieties among them selves.

Please note that Cultivation information and description are based on Dutch growing conditions.

#### **Preparation:**

- Take soil sample
- Make sure proper drainage is in order
- Field free of perennial weeds
- Ground in good condition and good structure
- Go to field where you are going to plant also after heavy rain, for proper drainage
- Make sure proper crop was on field before planting Peonies, because of nematodes
- Spray timely before planting with weed killer
- Visit local brokers or flower markets to get a good feel for the market and assortment
- Make planting plan: how to plant, harvest flowers, spray, weed control etc.

#### **Cooling:**

You can start planting Peonies in September / October / November. When you need to store Peonies at this time do not store at temperatures much lower than outside soil temperature. When stored at much colder temperatures this will break dormancy of plant too early and will create early sprout forming.

When roots need to be stored in December, put in cooler at 2 degrees C.

When you store Peonies in January and later it is best to store plants in freezer at -2 degrees C before planting.

When you receive plants and you need to hold plants for a short period of time just before planting please place in cooler at proper temperature. Make sure plants do NOT dry out, do NOT put fan in direction of plants. Drying out of the roots of Peonies is very bad for future performance.

#### **Soil-type:**

Peonies can almost grow on any soil-type as long they have enough drainage.

On sandy soil you plant Peonies on "bed" of 1,50 M wide, with 2 rows per bed with spacing of 35 cm. between plants. Also possible to plant 3 rows but then Peonies need to be planted interspaced and again 35 cm. between each plant within the row.

When you have enough drainage in the field you can also plant in "full field", then plants need to be spaced 40 to 45 cm. in all directions.

When you have heavy or clay type soil, plant peonies on ridges (like potatoes) on a bed of 1,50m. There are 2 ridges, plant Peonies 40 to 45 cm. apart within the row.

### **Time of planting:**

- Make clear planting schedule
- Outside planting from September up until March
- Add organic matter, cow manure
- Make sure there is proper drainage (very important)
- Prepare soil in good conditions
- When planting "set" the roots upright in the ground
- Plant roots just after field has been prepared, soil moist
- Keep in mind ways to harvest flowers, spraying etc.
- Keep in mind that you might like to cover crop with plastic poly houses to force crop

### **Planting Depth:**

Plant the top of the Peony root approx 5 to 7 cm. below soil level.

When planted too deep Peonies will produce less flowers, when planted too shallow roots will dry out and this will result in lower flower production. Also when planted too shallow, in winter it is not possible to spray against weeds because this will damage plants.

### **Crop time:**

In first 1 to 2 years after planting you should not expect commercial harvest of flowers. The plant takes this time to get established and create more "eyes".

When taken care of properly Peonies can be grown at the same location for long period of time (10 to 20 years) and produce a good commercial crop of flower production for many years.

### **Watering:**

Watering is an important part of growing Peonies.

Directly after planting Peonies need a good drench of water, so soil can make good contact with the roots and start rooting.

In spring Peonies can grow very fast and is crucial to have enough moisture to grow properly. Make sure to start irrigating on time so that the ground does not dry out.

With possible chance of night frost, water the Peonies to prevent bud abortion due to night frost.

The amount of water depends on temperature and evaporation.

### **Fertilizing: (depending of soil sample)**

It is very important to take a soil sample yearly to test the needs of the plants.

Peonies need a lot of N in the beginning of the crop/ shoot development. Make sure that N is timely available for the plant to absorb; if not plant gets more susceptible to Botrytis and other diseases.

End of January: extra N + K.

Just before growth: 7-14-28 / 12-10-18 plus organic material.

After blooming: 12-10-08; repeat after 1 month.

### **Normal fertilizing need of Peonies per Kg./Ha per year.**

With normal soil sample analysis

N requirement 150 Kg./Ha.

Phosphor, kg P205 100 Kg./Ha.

Calcium, kg K2O 225 Kg./Ha.

Magnesium, kg MgO 100 Kg./Ha.

### **Before growth starts, fertilize with:**

- Organic matter
- N
- P
- K (50% of total need)
- M
- C

**Just before blooming additional fertilizing with:**

- N through liquid spray; to enlarge flower bud
- M through liquid spray for quick take up
- C through liquid spray for quick take up
- Minor elements like iron etc. via liquid spray for quick take up.

**After flowering, for plant and flower development for next season:**

- K (50% of total need)
- N, minimum of 50 Kg./Ha.
- M

Please make sure that there is enough moisture available for the roots to absorb the fertilizer.

**Climate:**

**Greenhouse:** it is very important for Peonies planted in the greenhouse that they get enough cold in the wintertime; for stem and flower development for following spring. It is possible that due to a shortage of cooling not all shoots (eyes) develop, so they will not emerge.

**Outside:** In spring if there is chance of night frost, you should irrigate to prevent the frost to damage the flower buds.

Peonies need maximum light for good stem and flower development, so watch out for tall buildings, trees etc.

**Weed control:**

**Before growth starts:** spray with weed control; make sure the soil does not have big cracks etc. so spray can go to the roots to create damage. Consult with supplier for best spray to use.

**During the growth:** Consult with supplier for best spray to use. All sprays will hold back the growth somewhat; mechanical or hand weeding is also possible.

**Fall:** 5 weeks after removing the old stems, spray with weed control; consult your local supplier for best spray to use.

**Diseases and insects:**

Peonies are a relative easy crop with little problems; Botrytis will need to be treated.

**At time of sprout emerging:** Drench soil / each plant with 1/4 of liter of water with Sumislex / Collis, this will prevent many problems during the course of the crop.

**During the growing stage:** spray against Botrytis (Kenbyo / Teldor) about every 10 days or as needed.

**After flowering:** about every 2 to 3 weeks against Botrytis, or as required.

**After removing stems in fall:** **It is very important to remove all rests of foliage and stems from the field in fall.** When removed spray with Collis against Botrytis.

The most common insects with Peonies are: aphids and leaf nematodes; spray for example with Vertimec Gold and Mesurol.

**Disbudding:**

Disbudding Peonies is done before flowering when side buds are still small; this will give you larger flowers.

It is depending on variety and market situation.

**Cut flower harvest:**

Flowers of Peonies are harvested in April / May / June depending on location and variety. When flowers are harvested it is important to bring flowers to cooler to "cool" the flower buds to stop further development of the bud. To make sure we deliver good and healthy plant material our plants meet the following specifications:

- Young and healthy plant material (from 2 year old roots)
- True to variety
- Free of nematodes
- Free of perennial weeds
- Dutch grown (Limburg)
- Healthy plants, of a good size: 2-3 eye roots 90 per crate, 3-5 eye roots 60 per crate (this to use as guideline, can vary by variety).

When you are interested in growing peonies for potting, please contact us for additional information.

When you have "old" stock of peonies and you want to plant new stock, please check with us as we might have interest in your old plants.

*A clean environment always works positive on a good plant development and reduces the risk of diseases.*

For all varieties we have professional pictures, labels (picture tags) and other promotional material available; please inquire.

*Not suitable for human consumption.*

Green works is a supplier of young planting material for the professional cultivation of pot plants and summer cut flowers. For more information please check [www.green-works.nl](http://www.green-works.nl)

For more information please contact:

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Green Works International BV can never be held liable for any Cultivation information given and only to be used as a guideline.

Grower is at all times responsible for their own action and to read the label of the chemicals being used.