

PAEONIA GROWER SHEET

Peonies can be easily grown but do have some requirements that growers need to pay close attention to in order to have a successful crop. Peonies are known for their large and showy flowers in spring into summer months. Peonies will perform best once they are in the ground and established in the landscape. Plants typically take several years to settle down in the landscape but once they are, plants will produce larger flowers and flower more profusely. When possible, it is better to produce peonies in the larger containers such as a 5 gallon, than a small one. Peonies also prefer milder summer temperatures where the roots can stay cool. Certain varieties such as Sarah Bernhardt or Karl Rosenfield typically will flower at a young age, in the container when compared to another cultivar.

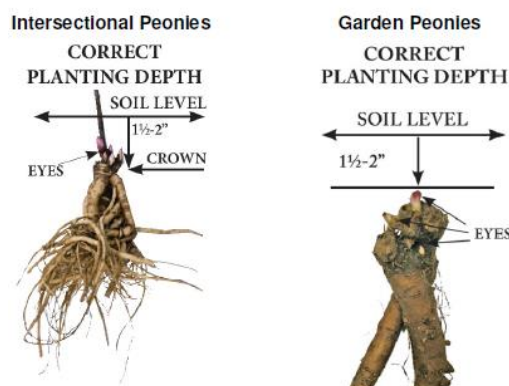
Soil Requirements: Peonies prefer a PH range of about 6.5 to 7.0. They do best in high organic composted soil mix. A bark-based, well-drained soil mix is ideal.

Transplanting: Depth of planting is very important. Peonies will not bloom if they are planted too deep so be sure the depth is correct at transplant as peony roots do not like to be disturbed. Also, the larger the initial container the better.

When to plant: For most growers, Production of peonies fall into 2 windows: 1) Fall plant for following spring sales. Usually this schedule applies to smaller container production such as 8 inch or 2 gallons. This schedule can also benefit growers in the warmer part of the country where peonies may struggle with high summer temperatures. 2) second and more lengthy option is to plant late spring for following spring sales. By allowing plants to develop roots over a longer cycle, the number of flowers per plant will increase when compared to a short cycle crop

Container sizes recommendation: 3-5 eye = 2 & 3 gallon. 6-8 eye = 5 gallon and up. (based on short cycle production)

Planting depth: Plant eyes at proper depth which is 1.5" below soil level. see diagram. Pack soil well and water plants thoroughly immediately after transplanting so that soil settles well around the roots. For customers in the south, plant the eyes right at soil level.



Sun and Moisture: peonies require well-drained soil but also like to be watered down thoroughly down to the bottom of the container. Peonies should be grown in part shade to full sun. Plants should also be grown in a well-ventilated area.

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Fertilizing: We recommend using a low rate fertilizer especially nitrogen such as 16-6-8 at 100-150ppm at every other watering. Over-fertilization will inhibit flowering.

Temperature: Vernalization requirements on peonies vary by cultivar, but they typically require between 400-700 hours at 32 and 37F. Plants imported in the fall from Holland usually have their requirements already met so growers do not have to provide any cold to plants. It's important to grow peonies cool; 45-55F days and 35-40F nights. Extended spikes and/or swings in temperatures during the dormancy period may cause plants to experience the yo-yo effect. This back and forth swings will cause plants to expend energy prematurely.

Pests and diseases: Few insects bother herbaceous peonies, but fungal diseases such as botrytis may be a problem especially during wet seasons. Stems of Peonies develop canker or blacken at the base and fall over or simply wilt. Leaves may show black or brown patches and buds may turn brown and fail to open. Fungicide and insecticide rotation when plants are emerging in spring will help. If there are foliage that has emerged after planting and prior to dormancy, remove foliage and debris from the containers. Be sure to follow up with a fungicide application.

Phytophthora – the disease is usually fatal to the plant and if found, infected plants should be segregated immediately to prevent spread. Again, follow up with a fungicide application.

Other usual suspects - Thrips, aphids and rust.

key reason why peonies do not flower:

- Wrong varieties: Certain varieties flower better a young age
- Too high nitrogen level
- Trusted supply source
- Vernalization requirements not met (typically does not apply to Dutch sourced materials)
- Incorrect planting depth. Too shallow or too deep
- Environmental: Water or heat stress during dormancy period
- Incorrect exposure: Insufficient light for buds to form.