



DONALD DANFORTH  
PLANT SCIENCE CENTER

## **Petunia Protocol**

*Petunia spp.*

### **Planting Seed**

1. Fill a 98 plug tray with Pro-Mix FPX and place on a white, bottom tray.
2. Water in soil, then sow seed across the top of soil placing 2-5 seeds per cell.
3. Cover seed with a light amount of FPX, wet, and place dome on flat.
4. Place domed tray on a non-mist bench in greenhouse G10A. Use clear RO water daily to mist soil when it is dry. A heating mat may speed germination.
5. Dome will be removed once seed has germinated. This can take up to three weeks.
6. After seeds have germinated, thin to one plant per cell.

### **Transplanting**

1. Once the plants have several sets of true leaves and their roots have filled out the plug cell, they can be transplanted. Plants can be transplanted into either 4" pots or into one-gallon pots. Berger 7-35% Bark is the recommended potting mix for growing petunias.
2. Fill pot with soil to top of pot. Water in so that soil settles. Carefully remove seedlings from seed flat using a spatula and gently transplant into new pot. Water in lightly around seedling.
3. Pots should be placed in a holding tray prior to being put back into the greenhouse.
4. As the plants grow, the pots will be spaced out so that plants are in every other cell of the holding tray.

### **Watering/Fertilizing**

1. Pots will be top watered with RO water and the plants are checked twice a day for watering needs.
2. The media should be allowed to dry down slightly between watering. Petunias do not like to stay saturated, but should not be allowed to get to wilting point.
3. Plants will be fertilized Monday/Wednesday/Friday with 15-16-17 at an EC of 1.5.
4. Regular watering will continue until plants begin to senesce or until the researcher has no further need.

### **Harvesting**

Once the flower head has dried, the seed pod will begin to form. Do not deadhead flowers if you want to collect seed. Once the seed pod is brown and dried, it can be removed from the plant. Seed can then be cleaned and removed from pod.



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### **Pest Management**

- The most common pests found on Petunia are the Two-Spotted Spider Mite and Western Flower Thrips. They can also get Aphids and Whitefly.
- Spider mites and Thrips are controlled through a combination of beneficial insects and pesticide sprays depending on population levels.
- Powdery mildew will be treated with fungicidal sprays if needed.

### **Typical Growing Conditions:**

Temp: 25°C/23°C (day/night)

Relative Humidity: 50%

Light: 300  $\mu\text{mol}/\text{m}^2/\text{s}$

Day Length: 16 hours