

**Cultural Information for:** Petunia Explorer Annual  
**Common Name:** Spreading Petunia  
**Botanical Name:** Petunia hybrida  
**Seed Count:** 255,000 - 312,000/oz. 9,000 – 11,000/gram  
**Optimum Germination Temperature:** 78 °F / 26 °C  
**Optimum Growing Temperature:** 55-68 °F / 13-20 °C

**Plug Culture : 200 cell - 4 weeks**

**Stage One** (days 1-7) Sow pelleted seed in a well drained sterile media with a pH of 5.8 to 6.2 and maintain a temperature of 72-75°F / 22-24°C. For proper and uniform germination do not cover the seed and use a fine mist for watering. Be sure to apply sufficient moisture at the start to thoroughly melt the pellets.

**Stage Two** (days 8-14) After seedlings emerge reduce moisture levels and allow the media to dry slightly in between fertilizer applications. Apply 100 ppm's of Nitrogen from a well-balanced Calcium Nitrate-based fertilizer and place in a well-ventilated greenhouse with high light. Optimum temperatures range from 65 °F/19 °C at night and 75 °F/25 °C during the day.

**Stage Three** (days 15-21) Seedlings are beginning to fill in the plug trays. Fertilize as needed to maintain EC levels between 0.8 and 1.0 mmhos (2:1 slurry). As leaves reach the edge of the plug tray a light application of B-9 at 2,500 ppm will help tone the plants. Supplemental lighting will promote leaf expansion and root development; especially during the darker months of January and February.

**Stage Four** (days 22-28) The plants are now reaching maturity and are ready for transplanting into pots and packs. Reduce moisture and hold at 60 °F/15 °C until transplanted.

**Transplanting: 6 to 8 weeks**

**Container Size:** Containers should be 4 inches/10 cm. in diameter or larger. One plant is sufficient per 4 or 6 inch/10 or 15 cm. pot with 3 plants per 10 inch/25 cm. basket.

**Media:** Use a well-drained disease-free, soilless media with a pH of 5.5 to 6.2 and a moderate fertilizer starter charge.

**Temperature:** Maintain night temperatures between 55-61 °F/13-16 °C and day temperatures between 61-68 °F/16-20 °C.

**Fertilizer:** Explorer petunias require more fertilizer than other types of petunias. For best results apply 250 ppm of Nitrogen at each irrigation using a well-balanced fertilizer. Calcium Nitrate-based fertilizers will help control excessive growth, but excess bicarbonate should be neutralized to avoid raising the pH above 6.3 as Petunia Explorer is sensitive to iron and boron deficiency. Plants can be top dressed with a slow-release fertilizer 10 days prior to shipping to enhance consumer satisfaction. Optimum E.C. is 1.5 to 1.8 mmhos (2:1 slurry).

**Flowering:** Explorer petunias are less sensitive to day length than other petunias of its type. Explorer will start to flower in late March to early April without supplemental lighting. In order to accelerate flowering one can light the plants starting at the 5th leaf stage. Night interruption (10 pm to 2 am) or day extension (7pm to 11 pm) using either HID or incandescent lights is recommended. HID lights will keep the plants more prostrate while incandescent lights will cause the plants to grow more upright.

**Growth Regulators:** Explorer petunias are vigorous and will require some growth regulating in order to make salable plants. An application of 2,500 ppm B-9 at day 7 and again at day 14 following transplanting is recommended. A Bonzi drench of 5 ppm 3-4 weeks after transplant (days 21 – 28) may also be necessary to keep the plants compact.

**Crop Scheduling:** Explorer petunias will flower in 6-8 weeks following transplant under long days in the spring and in 4-6 weeks from transplant during the summer under long days with high light and a minimum temperature of 65 °F/18 °C. Explorer Magenta flowers 7-10 days later, similar to Purple Wave.

4-6 inch/10-15 cm. pots: 6 weeks after transplanting in spring, 4 weeks in summer

Large hanging baskets: 8 weeks after transplanting in spring, 6 weeks in summer.