

# Petunia Explorer, Voyager series

Crop	Petunia
Series	Explorer, Voyager series
Botanical name	<i>Petunia hybrida</i>
Plant type	Annual
Seed type	Raw & Pellet
Seed count	9,000-11,000 seeds / gr 700-900 pellets/gr
Germination	20-25°C
Growing	18-25°C
Optimum pH	5.8-6.2

## Plug Culture: 4 weeks (200 cell tray)

**Stage 1:** (days 1-7) Sow pelleted seed into a well-drained sterile media with a pH of 5.8 to 6.2 and maintain a temperature of 20-25°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 2** (days 8-14) After the seedlings emerge, reduce moisture levels and allow the media to dry slightly in between fertilizer applications. Apply 100 ppm of nitrogen from a well-balanced calcium nitrate based fertilizer and place in a well-ventilated greenhouse with high light. Optimum temperatures range from 19°C at night and 25°C during the day.

**Stage 3** (days 15-21) Seedlings are beginning to fill in the plug trays. Fertilize as needed to maintain strong growth. As leaves reach the edge of the plug tray a light application of daminozide of 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 4** (days 22-28) The plants are now reaching maturity and are ready for transplanting into pots and packs. Reduce moisture and hold at 15°C until transplanted.

## Transplanting to finish: 6-8 weeks

**Container size** : Select a minimum pot size of 10 cm in diameter or larger. One plant is sufficient per 10 or 15 cm pot with 3 plants per 25 cm basket.

**Media**: Use a well-drained disease-free media with a pH of 5.5 to 6.5 and a moderate fertilizer starter charge

**Temperature**: Maintain night temperatures between 13-16°C and day temperature between 18-25°C.

**Fertilizer**: Explorer / Voyager requires 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 using a slow-release fertilizer 10 days prior to shipping to enhance consumer satisfaction.

**Flowering**: Explorer / Voyager is less sensitive to day length than other petunias of its type. In order to accelerate flowering, 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.

**Plant growth regulators:** Explorer / Voyager is vigorous and will require some growth regulating in order to make salable plants depend on growing conditions. An application of daminozide 2,500 ppm at day 7 and again at day 14 following transplanting is recommended. Paclobutrazol drench of 5 ppm 3-4 weeks after transplant may also be necessary to keep the plants compact.

**Crop Scheduling:** 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 18°C.

**Crop time**

10 cm pots: 8-10 weeks

15 cm pots: 8-10 weeks

Large hanging Basket: 10-12 weeks

*All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.*