Platycodon grandiflorus F_1

Pop Star

Perfect for Trio Production



A Pop Star is born!

- FastraX perennial: First year flowering without vernalization
- Most compact and well-branched habit on market
- Tight flowering window
- Low requirement of PGR application – less chemicals, more sustainable, cost and time saving
- Use as indoor and outdoor plant

Crop Time	Spring: 13 - 15 weeks
Height ⌀	7 " / 18 cm
Width ⌀	7 " / 18 cm
Exposure	Sun - Partial shade
Seed Form	Raw Seed
Heat Zone	9-1
Hardiness Zone	3b-9b
Product Use	Pots, Mixed Containers
Family, Origin	Campanulaceae, Eastern Asia
Minimum Germ. Rate	90 %

TECHNICAL GUIDE

Platycodon grandiflorus F_1 Pop Star

Flowering

Flowering Type: FastraX perennial – first year flowering plants without vernalization. Day-neutral plant platycodon flower regardless of the day length, but providing long days and high irradiance greatly affects earlier flowering.

Flowering Mechanism: High light intensity and warmer temperatures will shorten the time to flower. Supplemental lighting during germination will benefit but is not necessary. Higher light levels build stronger plants. Young seedlings need to be protected from high light levels until they are well established.

Plug Culture

Germination: Optimal conditions for seedling development, beginning on the day of sowing until radical emergence. Expect radicle emergence in 3-4 days.

Cover: No covering is necessary.

Sowing method: For 10,5 cm (4") pot 1 seed per plug; For 12 cm (5") pot 4 seeds per plug.

Media: pH 5.5-6.0; EC 1.0 <; 0.5-0.75.

Temperature: 20-21 °C (68-70 °F), after germination has occurred the temperature can be reduced slightly to 18-20 °C (64-68 °F).

Moisture: Begin with saturated (5) media for the first 4 days. On day 5 begin to reduce the moisture level to wet (4) for the next 4-5 days. Once the cotyledons have expanded reduce further to moist (3). This should occur on day 11-12. Begin to alternate between a moisture level wet (4) and a Medium (2). Let the media approach medium (2) before re-saturating to wet (4).

Humidity: 95-100 % until day 6; then reduce to 40-60 %. Provide proper ventilation and horizontal airflow to improve oxygen levels in the media. **Light:** Light is necessary for germination. If utilizing a germination chamber, provide light levels of 100-200 ft. candles, (1000-2,000 lx). Providing light during germination will benefit and improve quality. Protect seedlings from direct sun light by shading.

Fertilizer: Maintain an EC < 1.0; Fertilized water should not exceed an EC of 0.5. Begin fertilizing early using a calcium-based feed, 14-4-14 or 15-5-15 at 50-60 ppm.

Plug Bulking and Flower Initiation: Optimum conditions during the vegetative stage from cotyledon expansion to flower initiation. This stage is when the seedling roots to the edge of the plug.

Media: pH 5.5-6.0; EC 0.75-1.0.

Light: As the seedlings become well established they can be given higher light levels of 6-10 mol/ m2/day (2,000-3,000 ft. candles or 20,000-30,000 lx). Continue to protect seedlings from direct sunlight.

Temperature: 18-20 °C (64-68 °F).

Moisture: Alternate between moisture levels wet (4) and Medium (2). Allow the media to approach medium (2) before re-saturating to wet (4). Platycodon prefer slightly drier media conditions for good root development.

Fertilizer: Begin fertilizing at 100-150 ppm using calcium-based fertilizers 14-4-14; 15-5-15; 17-5-17 and 20-10-20 under high light conditions.

Growth Regulators: If needed apply a B-Nine (daminozide) spray at 750-1,000 ppm to keep seedlings from stretching. Avoid higher rates of B-Nine since leaf edge burn may occur.

Growing On
Media: pH 5.5-6.0; EC 1.0-1.5.

Light: Provide light levels of 12-14 mol/m2/day (3,500-4,000 ft. candles or 35,000-40,000 lx). Once plants are established providing long days of 16 hrs. and light levels of 16-18 mol/m2/day (4,500-5,000 ft. candles or 45,000-5,000 lx) for 3 weeks will shorten crop time and produce strong plants.

Temperature: 18-20 °C (64-68 °F) nights, 21-23 °C (70-73 °F) days for the first two weeks after transplanting. Thereafter temperatures may be lowered to 16-18 °C (60-64 °F) day and night. An ADT (average daily temperature) of 19 °C (66 °F) will give the fastest finished crop.

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow the media to reach medium (2) before re-saturating to wet (4). Allowing the media moisture level to dry back will encourage good root development.

Humidity: 40-60 % humidity is ideal. Providing good ventilation and horizontal airflow will help lower the humidity and dry back the media, providing oxygen to the roots.

Fertilizer: Higher rates of ammonium can now be used in the feed program. Fertilize at 150-200 ppm N using a 17-5-17 or 20-10-20 fertilizer. Under high light conditions 20-10-20 can be used.

Growth Regulators: B-Nine (daminozide) sprays at 1,000 ppm can be made as needed two weeks after transplanting. Higher rates may cause leaf edge burn.

Fungicide: Apply fungicides during long periods of low light and high humidity.

Common Diseases: Botrytis.

Pests: Primarily aphids and thrips.

Post Harvest: Fertilize with potassium nitrate at 100 ppm 1-2 weeks prior to shipping.

Plug & Finished Crop Time
Plug Crop Time

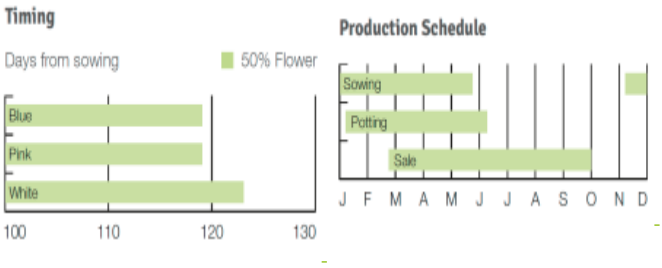
288 tray: 4-5 weeks
128 tray: 5-6 weeks

Finished Crop Time

10 cm (4") pots: 8-10 weeks

15 cm (6") pots: 13-14 weeks

Timing & Positioning Charts



Expert Tip

If using B-Nine (daminozide) sprays do not apply more than 1,000 ppm. Higher rates can cause leaf edge burn. Plants may also be too compact with a smaller flower.

Moisture Codes

Saturated (5)	Water is easily observed when finger is pressed on cell. Water moves freely from the top of the plug to the bottom.
Wet (4)	Media looks black and is not glistening. The media feels wet to the touch but there is very little water movement.
Moist (3)	Water is not easily visible. When finger is pressed on the cell there is very little movement from top to bottom.
Medium (2)	Media is not black, but now looks medium brown. There is no water movement when pressed with finger.
Dry (1)	Media has changed color to a very light brown and is dry to the touch.

All information in our technical guide is based on our own trials and would therefore be as guideline only. Detailed cultivation aspects vary depending on climate, location, time of year and environmental conditions. Benary expressly disclaims any responsibility for the content of such data/information and makes no representation or warranty for the cultivation of any products listed. It is recommended that growers conduct a trial of products under their own conditions.

COLORS OF THE SERIES

Platycodon grandiflorus F_1 Pop Star



White
PG0103R



Pink
PG0102R



Blue
PG0101R