Astilbe arendsii

# Astary®



- FastraX perennial: First year flowering without vernalization
- Compact plant habit with single colors
- Perfect for pot production

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| **Crop Time** | Spring: 18 - 20 weeks |
| **Height** ⌀ | 10 " / 25 cm |
| **Width** ⌀ | 9 " / 23 cm |
| **Exposure** | Sun - Shade |
| **Seed Form** | BeGreen Pelleting |
| **Heat Zone** | 8-2 |
| **Hardiness Zone** | 4-8 |
| **Product Use** | Pots, Bedding, Mixed Containers |
| **Family, Origin** | Saxifragaceae, East Asia |
| **Minimum Germ. Rate** | 85 % |

# TECHNICAL GUIDE

Astilbe arendsii Astary®

**Flowering**

**Flowering Type:** FastraX perennial – first year flowering plants without vernalization. Facultative long day plant. Long days above 12 hours and high irradiance will promote flowering.

**Flowering Mechanism:** Flowering is affected by day length, irradiance and temperature. High light intensity and warmer temperatures shorten the total crop time.

**Plug Culture**

**Germination:** Optimum conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in around 14 days.

**Cover:** Do not cover the seeds, light is required for germination.

**Sowing method:** 2-3 seeds per plug

**Media:** pH: 5.5-6.0; EC < 0.75

**Temperature:** Ensure 22-24 °C (72-76 °F) for germination until radicle emergence. Then, the temperature can be lowered to 20-22 °C (68-72 °F). After 4 weeks within the tray, a temperature of 18 °C (64 °F) is sufficient.

**Moisture:** During germination, maintain a saturated (5) level. After radicle emergence has occurred, alternate between a wet (4) and a moist (3). Let the media dry back before watering. Astilbe does not tolerate drought stress well, which leads to marginal necrosis.

**Humidity:** 90-100% until radicle emergence, then reduce to 40-60%. Provide proper ventiliation and horizontal airflow to improve oxygen levels in the media.

**Light:** Light is required for germination. From stage 2, additional supplemental light is optional. A day length of 13 to 14 hours during the plug stage will help aid in early root development leading to better uniformity of the youngplants. Long days and high light levels will promote early flowering. The light level can be increased up to 4,000-5,000 ft. candles (40,000-50,000 lx). Protect the seedlings from direct sunlight.

**Fertilizer:** Maintain an EC <1.3. Begin fertilizing early to improve seedling quality. Initial feeding should start in stage 2 at 50-100 ppm and gradually work up to 100-150 ppm during plug production. Use a complete balanced fertilizer.

**Plug Bulking and Flower Initiation:** Maintain optimal conditions during the vegetative stage from cotyledon expansion to flower initiation.

**Growth Regulators:** Not required.

**Fungicides:** During long periods of high humidity or low light intensity, fungicides should be used preventively.

**Growing On**

**Media:** pH: 5.5-6.0; EC 0.8-1.3

**Light:** After transplanting, you can provide 2-3 weeks of short days to encourage more compact, well-branched plants. Afterwards, high light levels and long days >13 hours will shorten the crop time and result in high-quality, uniform plants which will initiate flowers. Light levels up to 5,000 ft. candles (50,000 lx) can be provided.

**Temperature:** After transplanting, an average daily temperature of 15-18 °C (59-64 °F) encourages basal branching and compactness for a higher quality plant. For outdoor productions, ensure a frost-free cultivation of 3-5 °C (37-41 °F).

**Moisture:** Astilbe does not tolerate drought stress, which often occurs with outdoor productions during summer. This leads to marginal necrosis and the plants are recovering very poorly. Alternate between moisture levels wet (4) and medium (2).

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

**Fertilizer:** High fertilization levels are required. Feed weekly with 150-200 ppm N using a complete balanced fertilizer, but avoid overfertilization with nitrogen or iron deficiency. Ensure a sufficient potassium supply.

**Growth Regulators:** With proper temperature and moisture management, there should be no need for growth regulators. If needed, apply B-Nine (daminozide) as a spray at 2,000 ppm N to control the growth.

**Fungicides:** Apply fungicides during long periods of low light, cool temperatures and high humidity.

**Common Diseases:** Botrytis, powdery mildew, phytophthora

**Pests:** Mainly aphids and thrips.

**Plug & Finished Crop Time**
**Plug Crop Time**

288 tray: 7-8 weeks

**Finished Crop Time**

12-15 cm (5-6") pots (1*): 11-12 weeks

17-19 cm (7-8") pots (3*): 12-14 weeks

**Moisture Codes**

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| **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

Astilbe arendsii Astary®



**White**
AA0103P



**Rose**
AA0102P



**Mix (incl. Pink)**
AA0199P