Aquilegia hybrida F_1

Spring Magic®



- Early spring flowering perennial
- Perfect combination with Pansy production
- Dense leaf rosettes in full color range
- Full, globe shaped plant habit
- Low heat requirement
- BeGreen Primed: Chemical and microplastic-free

Crop Time	Spring: 22 - 26 weeks
Height ⌀	14 " / 35 cm
Width ⌀	10 " / 25 cm
Exposure	Sun - Partial shade
Seed Form	Raw Seed
Heat Zone	9-3
Hardiness Zone	3-8
Product Use	Pots, Bedding, Mixed Containers
Family, Origin	Ranunculaceae; Europe, Asia, North America
Minimum Germ. Rate	85 %

TECHNICAL GUIDE

Aquilegia hybrida F_1 Spring Magic®

Flowering

Flowering Type: Early spring flowering perennial, vernalization is required. Facultative long day plant. A day length > 13 hours with high light levels will result in flower initiation.

Flowering Mechanism: Flowering is affected by day length. 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 7-10 days.

Cover: Covering the seeds lightly with vermiculite promotes germination.

Sowing method: 2-3 seeds per plug

Media: pH 5.8-6.2; EC <0.5

Temperature: Ensure 20-22 °C (68-72 °F) until radicle emergence occurs. From stage 2, the temperature can be lowered to 16-18 °C (58-64 °F).

Moisture: Keep the substrate wet (4) for the first 10 days. After radicle emergence has occured, alternate between a moist (3) and a medium (2). Let the media dry back before watering.

Humidity: 95-100% until radicle emergence, then reduce to 40-60%. Provide proper ventiliation and horizontal airflow to improve oxygen levels in the media.

Light: Long days and high light levels are required during plug stage. Provide 1,000-2,500 ft. candles (10,000-25,000 lx) of light after radicle emergence and raise the light level up to 3,000-5,000 ft. candles (30,000-50,000 lx) in the last stage of plug production.

Fertilizer: Maintain an EC <0.75. Fertilized water should not exceed an EC of 0.5. Begin fertilizing early to improve seedling quality. Initial feeding should start after radicle emergence at 50-100 ppm and gradually work up to 100-175 ppm.

Plug Bulking and Flower Initiation: After 6-7 weeks plug time, the seedlings should be transplanted. Aquilegia requires 6 to 8 weeks of vernalization, which can be done in large plugs or the final pot. The foliage should be well-established before the chilling period at cool temperatures in winter begins. Then the plants can continue to grow faster in spring and initiate many flowers.

Growth Regulators: If necessary, sprays of B-Nine (daminozide) at 1,500 to 3,000 ppm are very effective in toning the plants and controlling growth during the plug stage. A wetting agent is required, otherwise the regulators will not adhere to the leaves. Pinching is not required.

Growing On

Media: pH 5.8-6.2; EC 1.5-2.0

Light: High light levels and long days >13 hours will produce high-quality, uniform plants which will initiate flowers. Light levels of 3,000-4,500 ft. candles (30,000-45,000 lx) are recommended. The shorter the day length, the longer the crop time.

Temperature: After transplanting, the plants require a vernalization period of 6 to 8 weeks at low temperatures of 2-5 °C (36-41 °F). Frost must be strictly avoided. For outdoor cultivation, fleece covering is necessary. Afterwards, the temperatures should be increased to 12-14 °C (54-57 °F) to stimulate growth and initiate flowering. Gradually increase the temperatures until an average daily temperature of 16-18 °C (61-64 °F) is reached for the finishing time.

Moisture: Alternate between moisture levels moist (3) and medium (2). Allow the media to reach a moisture level medium (2) before re-saturating. Avoid waterlogging and do not water the plants from above.

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: High fertilization levels are required. Feed weekly with 150 ppm N using a complete balanced fertilizer. As soon as buds occur, fertilization should be increased up to 200 ppm N, otherwise the older leaves will become necrotic.

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 2,500-5,000 ppm N early in the crop cycle to control the growth. A wetting agent is required, otherwise the regulators will not adhere to the leaves. PGR treatments should only be applied before flower initiation. Pinching is not recommended or needed.

Fungicides: Apply fungicides during long periods of low light, cool temperatures and high humidity. A wetting agent is required, otherwise the fungicides will not adhere to the leaves.

Common Diseases: Powdery mildew, alternaria leaf spot, phytium.

Pests: Primarily aphids, thrips and leaf miners.

Timing & Positioning Charts

Plug Crop Time	
288 tray	6-7 wks
128 tray	7-8 wks
Vernalization Time	6-7 wks
Finished Crop Time (from 288 tray)	
12-15 cm (5-6") pots (1")	9-10 wks
17-19 cm (7-8") pots (3")	11-13 wks

Expert Tip

A perfect combination for Viola and Pansy production.

Aquilegia is an early spring flowering perennial that requires vernalization. Sowing takes place in summer, mainly June to July, to obtain flowering pots in the following year. A chilling period of around 6 to 8 weeks at cool temperatures during winter is required for flower initiation. The foliage must be well-established before the chilling period begins. The plants can be forced for flowering with increasing temperatures from January onwards, so that they are ready for sale in spring.

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

Aquilegia hybrida F_1 Spring Magic®



Blue & White
AH0101R



Navy & White
AH0102R



White
AH0107R



Yellow
AH0103R



Pink & White
AH0104R



Rose & Ivory
AH0106R



Rose & White
AH0105R



Mix
AH0199R