

## ***Aquilegia hybrida*** **Spring Magic® Mix**

Hybrid columbine

### ***Culture guide***

**Uses:**

Perennial beds and borders, spring bedding, seasonal mixed containers

**Exposure:**

Sun

**Garden height:**

14" / 35 cm

**Crop time:**

9-10 months

**Sow time:**

Indoor forcing: Mid May-End July for flowering pots the following year (February onwards);

Outdoor forcing: March-April for flowering pots the following year (April onwards)

**Sowing method:**

2-3 seeds per plug

**Germination:**

14-21 days at 72-77 °F (22-25 °C), in media with low soluble salt levels below 0.5 and a pH of 5.8-6.2 Maintain uniformly moist soils and humidity levels above 95%. Lights aid in germination.

**Growing On:**

Transplant into a well drained media with a pH of 5.5 to 6.2. Two weeks after transplant begin feeding at 150 to 200 ppm N in well balanced fertilizer mix. Keep EC levels below 1.0. Flowers initiate when mature plants are grown below 50 °F (10 °C) or plugs are treated with temperatures below 40 °F (5 °C). Vernalization requirements vary by variety and plant maturity. Plant growth is optimum between 60-68 °F (15-18 °C) nights. Temperatures below 55 °F (13 °C) slow plant development and extend bloom time and intensify flower colour.

**Media:**

Use a well-drained, perennial substrate with 0-15 % clay, 0-15 % organic parts (e.g. wood fibres, bark), 1-1,5 kg/m<sup>3</sup>, complete balanced fertilizer, 1-2 kg/m<sup>3</sup> slow release fertilizer (3-9 months), iron-chelate, micronutrients, pH: 5.5-6.2.

**Temperature:**

Grow at 14-16 °C. After the roots are developed decrease the temperature to 8-10 °C. The temperature change will support the plant quality. In winter indoors frost free at 3-5 °C or outdoors. Forcing in spring for 6-7 weeks at 15-18 °C. Cold temperature at 10-12 °C will increase the cultivation time. Avoid high temperature at low light levels. A. hybrida needs for vernalization a chilling period (outdoors or chamber) of at least 6-8 weeks at 3-5 °C. The foliage of the plants has to be well developed for the chilling period.

**Fertilization:**

Moderate fertilization levels are required. Fertilize the crop weekly with 130 -150 ppm nitrogen (at 2 kg/m<sup>3</sup> slow release fertilizer in substrate), using a potassium balanced fertilizer (N: K<sub>2</sub>O-ratio: 1:1,5). Avoid high ammonium and high nitrogen levels. Don't fertilize after mid September. In spring fertilize with 100-150 ppm nitrogen of a potassium balanced fertilizer.