Campanula Heavenly Blue

Cultural Information for: Campanula Heavenly Blue Annual
Common Name: Rapion
Botanical Name: Campanula rapunculus
Seed Count: 23,000 /ounce 800 /gram
Optimum Germination Temperature: 65-68°F / 18-20°C
Optimum Growing Temperature: 55-60°F / 13-15°C

Plug Culture: 5 weeks (288 / 12 x 24 tray)

Stage One (day 1 - 10) Single sow pellet seed into a 288 plug tray using a sterile and well-drained media with a pH of 5.8 to 6.2. Cover the seed lightly with vermiculite and maintain high humidity and sufficient moisture to melt the pellet. Optimum germination temperature is 65-68°F/18-20°C. For the highest germination, maintain an even temperature of 68°F/20°C for four days after sowing.

Stage Two (days 11-21) After the seedlings emerge, place the plug flats in a bright and cool greenhouse with good air circulation. Apply a light feed of 100 ppm Nitrogen using a well-balanced fertilizer. Maintain moderate air temperatures, 68-72°F/20-22°C, to avoid stress and prevent rosetting.

Stage Three (days 21 - 28) Seedlings are beginning to fill in the plug tray. Fertilize as needed to maintain a media EC of 0.7 to 1.0 mmhos (2:1 dilution) using a well-balanced fertilizer. The use of calcium nitrate-based fertilizer is beneficial in helping to build strong and healthy transplants.

Stage Four (days 29 - 35) Seedlings should now have 2-3 true leaves and are now ready to transplant into cut flower beds. Campanula rapunculus as a species possesses a tap root structure and root bound plants will not produce a healthy and strong plant. In order to maximize stem length, DO NOT DELAY TRANSPLANTING!

Transplanting to flowering 14 weeks

Bed Preparation: Select a bed with good drainage and a soil that is high in organic matter. For best results, plant in full sun in a greenhouse with good ventilation. Space plants 6 x 6 inches/15 x 15 cm. apart and ***do not pinch. After transplanting do not allow the plants to dry out to prevent tip burn on the leaves.***

Fertilizer: Campanula is not a heavy feeder. Maintain a soil EC of 0.7 to 1.0 mmhos (2:1 dilution) using a well-balanced calcium nitrate based fertilizer. A lack of boron will cause distortion and tip abortion. A lack of iron will cause tip burn on the leaves. Optimum soil pH is 5.5-5.8.

Insects: Thrips and whiteflies

Disease: Botrytis

Lighting: Campanula rapunculus 'Heavenly Blue' is a long day response plant and will require day length extension for winter flowering. When the plants have 8 true leaves, (4-5 weeks after transplant), break the night from 10 pm to 2 am using "mum lighting". Maintain day length extension for 7- 8 weeks.

Crop Schedule: First flowering occurs 80–90 days from lighting (140-160 days from sowing), if the temperature at night time is maintained at a minimum of 50°F/10°C on the growing point. No supplemental lighting is required for a late spring flowering (transplanting in mid February).

Sow (greenhouse)	Harvest
Mid-August to mid-February	mid-January to late-June

Harvesting: Cut stems when two or three lower buds are open. Place stems in tepid water and keep in a cool spot in an upright position to avoid stem bending.

Post Harvest Care: Stems can be stored up to 2 weeks in water at 36°F/2°C. The vase life for stored flowers averages 7-10 days. Vase life for non-stored flowers averages up to 2 weeks. The best vase life is achieved by placing stems in 100°F/38°C water with a 5% sucrose pulse, (mandatory if using floral foam) for the first 24 hours. The consumer will see extended vase life is he uses a 1-2% sucrose solution in the vase. ***With the presence of sucrose, addition of a germicide is necessary to inhibit microbial growth. The most commonly used anti-microbial compound with cut flowers is 8-hydroxyquinoline citrate (8-HQC).***

Characteristics: Annual flowering with gorgeous ¾ inch/2 cm. light blue star-shaped flowers. Plants produce 15 stems with 5-6 stems being top grade and having a length of 32 inches / 80 cm. Beautiful cut flower or filler for mixed bouquets. Long vase life.

Varieties:
Campanula Heavenly Blue is available as pelleted seed only.

"All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best."

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