

TECHNICAL GUIDE

Delphinium grandiflorum Blue Mirror

Usage

Bedding and border plants, pot and container plants

Sow time

Annual forcing: December-May; Perennial forcing: Mid August-Mid September including wintering

Sowing method

2-3 seeds per plug

Germination

14-18 days at temperatures of 68-72 °F (20-22 °C), cover seed lightly and maintain constants humidity levels. Stage II: gradually lower temperatures to 64-68 °F (17-20 °C). Stage III & IV: begin light fertilization at 50-75 ppm nitrate nitrogen. Use low rates of phosphorus during plug production

Growing on

Transplant plugs 6-8 weeks after sowing. Finish at 45-75 °F (7-24 °C)

Media

Use a well-drained, growing substrate with 10-30 % clay, 0-15 % parts (e.g. bark, sand perlite) 1-2 kg/m³ complete balanced fertilizer, 2-4 kg/m³ slow release fertilizer (3-9 months), iron-chelate, micronutrients, pH: 5.8-6.5.

Temperature

Grow at 13-16 °C or outdoors. In winter indoors frost free at 3-5 °C or outdoors. Outdoor fleece cover and dry substrate needed. In spring the plants start to grow for 8-10 weeks at 15-20 °C. Temperatures below 13 °C in combined with short day is a cause for rosette leaf formation and inhibition of the flower initiation.

Fertilization

Moderate fertilization levels are required. Fertilize the crop weekly with 80-100 ppm nitrogen (at 2 kg/m³ slow release fertilizer in substrate), using a complete balanced fertilizer. Avoid high ammonium and high nitrogen levels. Don't fertilize after flowering or after mid September. In spring fertilize with 130-150 ppm nitrogen using a complete balanced fertilizer. Prevent magnesium deficiency by applying magnesium sulphate (0,05 %) 1-2 times and in case of Iron deficiency apply iron-chelate for 1-2 times. The fertilization with slow release fertilizer is favour as against with complete balanced fertilizer, because the roots are very sensitive to high salt levels in substrates. Avoid high fertilizer concentrations, it is advisable to fertilize several times with low concentrations weekly.

Stage I Starts with the radicle breaking through the testa. The roots are touching the medium. Ends with fully developed cotyledons.

Stage II Starts from fully developed cotyledons. Ends with the fully developed true leaf or true leaf pair.

Stage III Starts from the fully developed true leaf or true leaf pair and ends with 80% of the young plants being marketable.

Stage IV All young plants are ready for sale and in the process of being hardened off. This stage lasts about 7 days.

The cultural recommendations are based on results from trials conducted under Central European conditions. Different conditions in other parts of the world may lead to deviations in results achieved.