

# Dianthus Diamond

|                |                               |
|----------------|-------------------------------|
| Crop           | Dianthus                      |
| Series         | Diamond                       |
| Botanical name | <i>Dianthus hybrida</i>       |
| Plant type     | Annual & Biennial             |
| Seed type      | Raw                           |
| Seed count     | 800-1,500 seeds / gr          |
| Germination    | 20°C - 5-7 days light favored |
| Growing        | 17-20°C                       |
| Optimum pH     | 5.8-6.2                       |

## Plug Culture: 5 weeks (288 cell tray)

**Stage 1** (days 1-7) Single sow seed of Dianthus Diamond into a plug tray filled with well-drained media. Lightly cover the seed with vermiculite and provide sufficient moisture and a soil temperature of 20°C.

**Stage 2** (days 8-15) When seedlings emerge, place plug trays in a cool, well-ventilated greenhouse with bright light. Apply a light feed of 75-100 ppm from a well-balanced fertilizer to ensure a healthy start.

**Stage 3** (days 16-35) Dianthus tolerates a wide temperature range but does best at cooler temperatures. For optimum growth, maintain day and night temperatures between 16-22°C. Fertilize at least once a week with 150-200 ppm to maintain healthy plants. The use of calcium based fertilizers will produce strong seedlings and reduce soft growth. Chlormequat can be used to control height. The use of chlormequat may cause some phytotoxicity, (yellowing of the leaf margins) and will be more pronounced on undernourished seedlings. Some growers prefer to use paclobutrazol which is effective and less toxic. If using paclobutrazol, it is best to wait until the plant canopy covers the plug tray to avoid introducing paclobutrazol into the media.

**Stage 4** (days 35) Seedlings are now ready for transplanting to pots. It is best not to delay transplanting, but if necessary, maintain plants at 13-15°C and reduce fertilizer to avoid overgrowth.

## Transplanting to finish: 5-7 weeks

**Media:** Select a well-drained media with a pH in the 5.5 to 6.5 range and a low EC level of 0.5 to 0.7 mS/cm (1:2slurry).

**Transplanting:** Dianthus is a soft tissue plant and one should avoid planting the seedlings too deep to prevent stem rot.

**Temperature:** Dianthus Diamond grows best at 17-20°C.

**Fertilizer:** Dianthus is not a heavy feeder, but one should fertilize on a regular basis to produce healthy plants. Avoid using fertilizers that contain high amounts of ammonium nitrate to prevent plant stretch and soft growth; especially under warm temperature conditions.

**Plant growth regulators:** Using culture to control height is recommended. Cool temperatures and a calcium-nitrate based feed program work well to avoid plant stretch and soft growth. Chlormequat or paclobutrazol can also be used to control plant height, (see notes under Stage 3).

**Crop Schedule:** Dianthus Diamond is bred to flower early and will generally bloom in 10-12 weeks after sowing. Dianthus Diamond is recommended for both spring and autumn sales.

**Marketing:** Dianthus Diamond will flower early and is both cold and heat tolerant. Diamond is available in a wide range of separate colors and a mix. Blush Pink is a unique color that opens white and gradually darkens to a bright rose pink.

*All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.*