Bouquet Series Dianthus
Exceptional Additions to Bedding & Commercial Cut Flower Programs

- Featuring open, lacy flowers with a slight fragrance, these tall, sturdy plants have a “wispy,” informal look and well-branched, strong stems that do not need staking.
- Versatile series is an exceptional landscape and bedding plant, and makes an excellent commercial and home garden cut flower.
- Large number of stems and good basal branching make showy garden displays all season long.
- “Cut-and-come-again” flowering and no need for staking make these easy-care plants a perfect choice for backyard cutting gardens.
- Bouquet dianthus are available as seed or plugs. Call your local distributor or PanAmerican Seed at 800 231-4868 today.

Bouquet Dianthus for Bedding Plant Programs
- Perform as a first year-flowering perennial and can overwinter in many areas; no vernalization is needed. Bouquet dianthus are hardy to USDA Zone 4 (30°F/-34°C minimum temperature).
- Versatile, award-winning performance: Mississippi Medallion Award for performance in southern climates and Minnesota Perennial Select Award for cold tolerance.
- Vigorous, frost and heat-tolerant plants are also well-suited to landscapes.
- Low-energy input crop; grow cooler than other Spring bedding plants and save on heating bills.
- Garden height is about 18 to 24 in. (45 to 60 cm).

Bouquet Dianthus for Cut Flower Programs
- Produce high yields of salable stems for commercial greenhouse and field cut flower producers.
- Flower earlier than other vegetatively propagated dianthus, with straight, strong stems.
- Plants reach 18 to 24 in. (45 to 60 cm), with tallest growth resulting from early Autumn-transplanted, greenhouse-grown plants.
- Vivid floral colors make these dianthus excellent choices as bouquet filler items.

D. barbatus interspecific
Approximate seed count: 8,575 S./oz. (300 S./g)

Plug Production for Bedding Plant & Cut Flower Programs

Plug Tray Size
Bouquet dianthus are best produced in 406-cell or larger plug trays for bedding plant programs. For cut flower programs, a 200-cell tray can be used.

Sowing
Use a well-drained, disease-free medium with a pH of 5.8 to 6.2, as well as good aeration and water-holding capacity. Cover seed with medium layer of coarse vermiculite at sowing. Seed takes about 3 to 4 days to germinate.

Temperature
Germination: 64 to 68°F (18 to 20°C)
Cotyledon emergence: 65 to 70°F (18 to 21°C) days; 60°F (15°C) nights
True leaf expansion: 60°F (15°C) days; 55°F (13°C) nights

Light
Light is required for germination.

Humidity
Maintain 95 to 97% relative humidity until cotyledons emerge.

Fertilization
Beginning at Stage 3, fertilize 2 times a week with 50 ppm N. Increase the nitrogen concentration to 100 ppm after 1 week, and continue this program until the plugs are finished. Maintain the EC at 0.5 to 0.75 mmhos/cm, and increase to 1.0 mmhos/cm at Stages 3 and 4. pH can be maintained at 5.8 to 6.2 throughout.

Growing On to Finish for Bedding Plant Programs

Container Size
Suitable for production in 5-in. (13-cm) pots, or gallon containers with 3 plugs per gallon.

Temperature
Days: 60 to 72°F (15 to 22°C)
Nights: 50 to 60°F (11 to 15 °C)
Fertilization
After plants are established, apply a calcium-based fertilizer or 15-5-15 at 100 ppm, 1 to 2 times per week. Dianthus require adequate calcium in their fertilization program.

Growth Regulators
Since Bouquet dianthus are very responsive to growth regulators, growers should experiment with concentrations and application timing. For example, an application of Bonzi spray at 20 ppm can be applied 2 weeks after transplanting into a 4-in. (10-cm) or larger pot. For 6-in. (15-cm) pots or gallons, another application of Bonzi spray at 20 ppm may be required 2 weeks later.

Crop Scheduling (sow to flower)
Late Spring/Summer: 12 to 13 weeks
Late Summer/Winter: 14 to 18 weeks

Cultural Tip
Use a powdery mildew preventative program.

Growing On to Finish for Commercial Cut Flower Programs

Transplanting
Transplant directly into ground beds approximately 5 weeks after sowing, spacing 3 to 4 plants per net sq. ft. (approx. 30 to 40 plants per net sq. m).

Temperature
60 to 72°F (15 to 22°C). Plants are frost-tolerant, although frost will damage flowers.

Light
Best results are achieved when plants are grown in full sun or in a high-light greenhouse. The combination of high light with high heat will result in shorter stems.

Fertilization
After plugs are established, apply 200 ppm calcium nitrate per week.

Netting/Pinching
A single layer of support netting is recommended.

Cut Flower Crop Schedule
Bouquet dianthus can be transplanted year-round in coastal California or similar climates, where mid-August to February 1 transplants will develop the best stem length. Greenhouse-grown plants generally produce taller stems than plants that are field-grown. Harvest stems with at least 3 open flowers.

Weeks from sow to transplant:
200-cell tray: 5 weeks

Weeks from transplant to first flower:
Greenhouse:
  Late Spring/Summer: 8 to 9 weeks
  Late Summer/Winter: 9 to 13 weeks

Field:
  Late Spring/Summer: 8 to 9 weeks
  Late Summer/Winter: 15 to 18 weeks

Stem Length (Field):
  Late Spring/Summer: 18 to 20 in. (45 to 50 cm)
  Late Summer/Winter: 25 to 30 in. (65 to 75 cm)

In the field, the second-crop stems of late Spring/Summer transplants grow 20 to 25 in. (50 to 65 cm) long. For the Summer/Winter transplants, second-crop stems can reach 25 to 35 in. (65 to 90 cm). Plants can be harvested continuously for approximately 4 to 6 weeks. If cut back, a second flush of flowers will be ready to harvest in 8 to 10 weeks. Note: All information is based on California coastal conditions.

Cultural Tip
In outdoor production, a preventative program for powdery mildew may be required.