

Cultural Details: **Dianthus**

A large collection of species, divided into Annual and Perennial varieties, which are dealt with separately here.

ANNUAL TYPES

Annual Dianthus have a range of uses. As a Summer bedding plant, they are generally sold in May and June, although they can be sold as pot bedding throughout the Summer, and some types (the results of crossing between *Dianthus chinensis* and *barbatus*, the Sweet William) are specifically produced for sales in flower in Autumn.

Variety Selection

For bedding plant sales in Spring, sold in packs as green plants with a colour label, or in 9cm pots in flower, select from the large-flowered F1 hybrids such as Diana, Magic Charms and Carpet. The separate colour Parfaits, Corona Cherry Magic and Valentine are popular flowering choices also.

For sales either in Spring or Autumn, choose the interspecific crosses such as Telstar, Diamond and Ideal, with smaller flowers. These plants are fairly hardy so can be sown late in the season (around mid-August), overwintered cool, and brought back into growth in the Spring for early sales of flowering plants.

Open-pollinated varieties are also available for inexpensive mass bedding production.

Programming the Crop

Sow January-March for sales April-June. For Summer flowering pot plants sow in March. For Autumn flowering sales, sow in April. Allow around 12-14 weeks sowing to flowering.

Propagation and Growing-on

Sow the seeds (around 800 per gram) onto the surface of a free-draining, open, seed sowing compost, which should be thoroughly wetted with a suitable fungicide prior to sowing (to prevent damping-off diseases), and the trays allowed to drain. Sow into plug trays to prevent root disturbance, or into seed trays. Cover seeds lightly with vermiculite, and cover trays with clear or milky polythene to maintain humidity, until the first seedlings are visible. Germination takes around 7 days at 18-20°C – higher temperatures may reduce germination. Keep the germinating seedlings moist at all times. Once seedlings are growing well, drop the temperature to around 10°C.

After around 5-6 weeks the young plants are ready for transfer into 6- or packs, or 9cm pots, as required, filled with a standard potting compost. Grow on at around 15 °C until they are nicely established, then the temperature can be dropped back to around 10 °C. Use a moderate strength liquid feed programme on the plants once established in the pack/pot. They can be sold as soon as there is good leaf coverage in the pack, or in flower if preferred.

Growth Regulators

Growth regulators can be used (according to the manufacturers' guidelines, to ensure a compact habit, especially for flowering pot work. The recently-introduced Diana series is naturally very compact, so such treatment should be unnecessary.

Pest and Disease

Maintain good air movement through the crop, and water in the morning rather than the evening to keep the foliage dry and lessen attack by Botrytis. It is essential to pay attention to glasshouse hygiene when growing Dianthus, using only fresh trays, pots, compost, water and clean bench tops to avoid encouraging damping-off diseases. Fusarium Wilt can affect the crop - destroy any affected plants. Check for the white patches of Powdery Mildew on leaves. Monitor for orange brown spots on the foliage which would indicate the presence of Rust, and spray accordingly. In fact Dianthus are fairly tough plants which should suffer little from pest and disease if grown under clean conditions, and kept growing steadily.

Check for signs of pests such as thrips, aphids and Spider Mite, spraying accordingly. Do not over-water the crop.

PERENNIAL TYPES

The popular deltoides types produce masses of flowers on compact plants, for use as alpine and low border plants. They have fine seed at up to 4,000 per gram. Either sow in January-February and treat as the annual types above, for producing flowering plants for sale in Summer, or sow in May-July, for sales as green plants in 8 or 9cm pots, with a colour label in Autumn and early Spring, or in full flower in late Spring-early Summer of the following year. Other cultural information as above.

The other perennial types we offer make excellent alpine and low border plants for flowering generally early in the season. Once again, it is possible to sow these (800-1000 seeds per gram) in January or early February for sales in Summer in flower, or in May-July for perennial sales as above. Follow the cultural instructions already provided. Sell in 8-9cm pots.

Information provided for guidance only, as cultural practices and climatic circumstances vary.