

Family: Caryophyllaceae
Use: Outdoor containers and pot, suitable for borders and beds.
Plant type: Annual
Height in pot: 20-25 cm (8-10 in.)
Garden height: 25-35 cm (10-12 in.)

Seed count: 1,100-1,250/ gram (30,000-35,000/oz)
 Seed count varies by colour and seed lot.
Seed form: Raw and pelleted.

Germination:

Media pH 6.0
 temperature 21-24°C (70-75°F)
 EC 0.5
 Ammonium based fertilizers are not recommended, use calcium based fertilizers instead.

Stage 1: radicle emergence

Seeds may be covered lightly with vermiculite.
 Radicle emergence will take place in 2-4 days.
 Keep media moist but do not overwater.
 Light is not necessary for germination. Dianthus is very sensitive to high salt levels in stage 1 and 2.

Stage 2: expanding stem and cotyledons

Keep media moist, lower night temperature to 18°C (65°F).
 Under low light conditions supplementary lighting is advised to promote compact strong seedlings.

Stage 3: development of first true leaves

Keep media moist. Temperature days 18-20°C (65-68°F).
 EC 0.5-1
 Growth regulators: Cycocel (1-2 cc/ltr), Bonzi (0.5 cc/ltr) or A-rest.
 Treatments can be applied at the fourth true leaf stage.

Stage 4: finishing/holding stage

Temperatures can be dropped to 15°C (60°F). Higher temperatures will result in more use of growth regulators to prevent stretching.

Growing on:

After 5-6 weeks plants can be transplanted, it will take 9-10 weeks to finish in the pack.
 Allow an extra 2 weeks for 10 cm (4 in.) pots.
 Media: a well-drained, porous media is best to prevent over watering.
 pH 6.0-6.5
 EC. 1.0-1.75
 Moisture: allow media to dry between watering, do not allow plants to wilt severely, this will result in yellow leaves and serious setback in growth.
 Light: Increase total light energy to promote early flowering, daylength extension is not necessary but will promote bud set.

Pests:

Spidermites, Thrips and whitefly.

Diseases:

Alternaria leaf spot, Fusarium wilt.

Growth regulators:

Dianthus interspecific is sensitive to:
 - Cycocel, spray up to 5 cc/ltr. Some varieties will show leaf damage at high Cycocel levels. Also a drench of 3cc/ltr. will be effective.
 - Bonzi as spray or drench
 - Dif

Scheduling:

12-14 weeks for packs. Pot production, 10 cm (4 in.), may need an additional 2-3 weeks.

Sowing	Potting	Flowering
wk 2	wk 8	wk 19/20
wk 4	wk 10	wk 21/22
wk 9	wk 14/15	wk 24/26

Advise:

Ensure best light conditions especially early season and grow dry to restrict and harden growth. Transplant on time.