

Alcea (Hollyhock)

Spring Celebrities™ Series

Alcea rosea annua



COLORS AVAILABLE:	Carmine Rose, Crimson, Lemon, Lilac, Pink, Purple, Rose, White, Formula Mix
FLOWER/GARDEN SIZE:	Annual / 24-32" height; 12-18" width
NOVELTY CHARACTERISTICS:	Dwarf, multi-stemmed plant, large, semi-double to double flowers, long bloom time, at least 3 months under favorable conditions
MARKET USE:	Large pots, containers, garden
<u>CULTURAL RECOMMENDATIONS:</u>	
CONTAINER SIZE:	
SOWING:	Large plug, 200 tray or larger ; sow March - June
FINISH CONTAINER:	1 or 2 gallon, or larger
PLUG STAGE:	
GERMINATION:	8 – 10 days, dibbled tray, cover seed with vermiculite approximately ¼ to ½ inch deep; 72-74°F for most of plug life, plugs can be cooled to 68 – 70°F through stages 3 and 4
EC (POUR THRU METHOD)	0.5-0.8 during germination, slightly higher for stages 3 and 4
PLUG FINISH TIME:	5 weeks
FINISHING:	
TRANSPLANT:	1 plug into 1 gallon pot; avoid low levels of nitrogen to the point that leaves become yellow. Maintain adequate fertilizer levels and monitor pH closely
DAYS TO FLOWER FROM	
SOWING:	105-119 days, May to October
TEMPERATURE:	65-75°F days
EC:	1.0-1.3 mS/cm
pH:	5.8-6.0
COMMON DISEASES/PESTS	Rust, use preventive spray, control white fly, thrips, aphids, provide adequate ventilation

Please see "Notes" and PGR information on following pages

PLUG STAGE NOTES:

- Seed germinates quickly and can become stretched very quickly in its short plug life. For best results, maintain the recommended temperatures during the germination process. If germination must take place in a chamber, recommendation is no longer than two (2) full days of elapsed time before removing to the greenhouse bench. (While no testing for chamber germination has been done, recommendation is sowing to bench as opposed to chamber germination for the greater control of stretch.)
- Water in plugs, but not to drip, maintain constant humidity as vermiculite cover may make it difficult to determine moisture level. **Do not allow plants to wilt at any stage.** Once roots have reached the bottom of the plug cell they can be moved to cooler temps, 68-70°F. Cool and dry conditions will help in avoiding any leaf diseases and also will assist in keeping plant from stretching. Keep semi-dry but not to wilt.
- B-Nine at 2500 ppm or 500 ppm Cycocel spray at first true leaves, no more than 3 applications through plug life
- Transplant directly to final container
- Lighting/Plug Stage: day length extension to 14 hours until March 15 is recommended for finishing plants before May 1. Lighting is very important particularly during the winter months. Extended day to 14 hours (HPS lighting) is recommended during the plug life. No lighting required after transplant. Long days help build plant bulk and speed up flowering. With Alcea, the faster bud set appears, the shorter the end product will be.
- Fertilization/Plug Stage: fertilizing with nitrate nitrogen formulations only, like 15-0-15. Avoid allowing the plants to yellow. If water is being corrected with acid to control pH, then 125 to 175 ppm of fertilizer once or twice a week should suffice.

Check List:

1. Follow recommended germination temperatures, cool only when established
2. Long-day lighting for faster flowering
3. Growth regulator(s) early and often
4. Do not allow to dry out to wilt
5. Monitor nutrition

FINISHING STAGE NOTES:

- As noted in the plug stages, it is important to avoid low levels of nitrogen to the point that leaves become yellow. Providing pH levels are maintained at recommended levels, a trusted Ca/Mg fertilizer, like 13-2-13-6-3 will assist in building a strong plant. Use ammonium based feeds to add height, vigor or to correct high pH levels.
- Temperatures should be maintained, as much as possible, to those recommended. If Alcea are exposed to cool night and day time temperatures, 45-60°F, on a consistent basis, the finish time will be skewed upwards. Short durations of cold temperatures can be beneficial and help in curtailing vigorous plant growth and, in later stages, will prolong the flower life.
- Flowering will form first on a main center stem, which will be buried below the canopy of the plant during the early development. Ultimately, this main stem will bolt from beneath the foliage and, at this point Bonzi or Paczol should be applied to complete the final product form. Once the flower spike emerges approximately 6 to 8 inches above the canopy, it is recommended to apply a drench of- Bonzi or Paczol @ **0.5 ppm** (1/2 part per million). A follow up application of Bonzi or Paczol is left to grower discretion.

- Growth regulation is the most important factor in the early days and weeks following the transplant of the Alcea. Rather than withholding feed or using too cool temperatures to control the height of the Alcea, use either, B-Nine or Cycocel only to hold back and form the plant. As soon as the Alcea begin rooting, 3 to 5 days after transplant, PGR application can begin. Recommendation is once per week for the first three weeks, then, as needed afterwards. As a precaution, Alcea Spring Celebrities have soft thin leaves, avoid applying any chemical when leaf temperatures are high as there may be a possibility of burn. **Once flower buds appear, cease any Cycocel and B-Nine applications.**

Check List

1. Growth regulation early and often
2. Closely monitor fertilization
3. Keep and maintain favorable temperatures
4. Stop B-Nine and Cycocel at bud emergence
5. Use only 0.5 ppm Bonzi when flower spike emerges

PGR TREATMENTS:

Growth Regulation is the key to producing a compact plant, particularly in the later stages. As the plant matures, cooler temperatures can be used to control the vigor.

Plug Stage: Once the first true leaf is revealed, growth regulators can be started. Apply B-Nine or Cycocel at least once a week after true leaf appears. B-Nine at 2500 ppm or 500 ppm Cycocel, no more than 3 applications through plug life.

Finishing: B-Nine at 2500 ppm or 500 ppm Cycocel spray as needed until buds appear. Stop B-Nine and Cycocel applications when bud emergence is detected. ***Spraying after bud emergence will deform and delay flowering.*** A light drench of Bonzi or Paczol at 0.5 ppm when initial flower spike has extended to 6-8 inches will keep plant more compact for shipping.

COMPACT VERNALIZED PROGRAM:

- Sow in 50 cell
- **From sow:**
 - **Week 5:** move outside/natural conditions in California, or reduce night temps to 38-45°F
 - **Week 11:** transplant in greenhouse to 1 gal; cut plants down to 1" above soil line; provide 14 hour days; 62°F nights for 2-3 weeks
 - **Week 13:** turn off lights, 50°F nights to finish
 - **Week 14:** Paczol drench 1ppm
 - **Week 17:** 2nd Paczol drench 1ppm for more compact plants
 - **Week 19-20:** first flowers
 - **Week 21-22:** full color