

Lisianthus F1 Falda™ Series

Eustoma grandiflorum



COLORS AVAILABLE:	II Light Apricot, II Salmon, II Yellow
SIZE/PLANT HABIT/TYPE:	28 – 35 inches tall/Good branching/High quality, fringed, single flowers on strong stems
NOVELTY CHARACTERISTICS:	Fringed flowers in abundance
MARKET USE:	Cut flower
<u>CULTURAL RECOMMENDATIONS:</u>	
PLUG STAGE:	
TRAY SIZE:	392, 288; Deep trays are preferable for better rooting into the beds
GERMINATION:	10-14 days at 65°F – 68°F, do not cover seed (light required for germination)
GROWING MEDIUM PH	A well-draining, well-aerated medium with a pH of 6.5 – 6.8 is essential for proper root development and to avoid damp-off disease problems; a preventive drench of a fungicide for damp-off pathogens is recommended
EC (POUR THRU METHOD):	0.6 – 1.0; seedlings are very sensitive to high salt levels, avoid letting the plugs wilt completely, as this can induce rosetting
SUPPLEMENTAL LIGHTING:	4 hours night interruption recommended under short-day culture; incandescent is sufficient for bloom response, but HID lighting will result in best quality
GROW ON TEMPERATURES:	Temperatures below 65°F at night are recommended for finishing the plugs to prevent rosetting (temps above 70°F at night or 86°F during the day can induce rosetting)
PLUG FINISH TIME:	7 to 9 weeks - seedlings should be planted into the final beds at the 4 true-leaf stage. Stress from too long of culture or from holding in the plug tray before field planting can lead to premature stem elongation, or bud blasting in production, due to improper rooting into the final planting beds
FINISHING:	
TRANSPLANT:	Transplant at the fourth true leaf stage – generally around 70 days from sowing, depending on area of production
SPACING:	5" x 5" (some growers use 4" x 6" spacing)
DAYS TO FLOWER FROM SOW	Group I is early flowering, to group IV, which are the latest to flower from sowing
TEMPERATURE:	75 - 85°F daytime/60 – 65°F night Flowering is normally initiated at the 7 to 10 leaf node stage at these temperatures under long-day conditions. Average temperatures below 55°F makes stem elongation for flowering extremely slow to develop, and flower initiation is suppressed. Temperatures below 45°F will stop growth
COMMON DISEASE/PESTS:	Fusarium, pythium, rhizoctonia, botrytis, downy mildew/Fungus gnats, whitefly, thrips, aphids, leaf miners

Please see additional Notes on next page

NOTES:

ROSETTING:

- The primary cause for 'rosetting,' or failure of the flower stems to elongate uniformly for a crop, is an average temperature (max and minimum temps combined divided by 2) over 77°F or daytime temperatures regularly exceeding 86°F in the time from germination to the second set of true-leaves in plug culture.
- Rosetting, once experienced, can usually be broken by exposure of the seedlings to a temperature of 50°F for a period of 30 days.
- If high daytime temperatures are experienced during plug culture, chilling the plugs at night to temperatures of 58-60°F can be effective in preventing rosetting. In areas where pad cooling is effective, placing the plugs near the pads will help keep these temperatures down, but even portable air cooling devices and tenting have been utilized to keep the night temperatures cooled to 58-60°F to minimize rosetting to daytime temperatures up to 90 plus degrees F.

BUD BLASTING:

- 'Bud Blasting' is the aborting of developing flower buds when they are in the development stage, usually from bud emergence until they are between 1 and 2 inches long, most commonly caused by low light levels; other cultural conditions can factor into bud blasting as well. Shade cloth should not be used on Lisianthus at low-light times of year.
- Other contributory causes for bud blasting are:
 - Low levels of nutrition
 - Improperly developed root system
 - Low levels of ground moisture
 - Extremely hot conditions
- HID supplemental lighting during short-day, low light times of year will help prevent bud blasting. Under short-day conditions, daylength extension to 16 hours or night interruption of 4 hours will help plants maintain developing flower buds – high light intensity is as important as long days and temperature for proper flower development. Be sure to maintain night temperatures above 56°F when lighting.
- To avoid bud blasting, make sure plugs are planted at the proper stage, at 4 true leaves (2 nodes), to afford best rooting into the bed medium; using deep plug trays provides a better root system for bed planting
- Make sure beds have ample soil moisture and fertility levels after transplanting to allow the development of a strong, deep root system that can sustain the later bud formation and readily access ground moisture and nutrition
- When planting for production under low light or extremely hot conditions, growers will often increase plant spacing to 6" x 6" to afford better air movement and light penetration around the plants, and also to give the individual root masses more area for water and fertilizer absorption into the developing plants