



ISP technologies

environmentally clean crop production for healthier food

Chrysanthemum

(Based on "ppm of irrigation solution)

Chrysanthemums are heavy feeders that grow best at a pH of 5.4 - 5.8. This makes water quality management a very important factor in growing a successful crop. Pot grown garden mums are generally grown in a peat-based media mix with varying amounts of bark, composted bark and coir. Managing input costs is also a major factor in producing a profit in what is often a highly competitive marketplace for fall mums. Ensuring a fast start after planting your rooted cuttings is critical.

At planting, water the rooted cuttings with ISP Master Gardener 20-20-20 at 250-300 ppm (1.04 - 1.25 pounds per gallon using a 1/100 injector). The goal is to encourage soft growth and free branching from the earliest. Plants need to be in full sun. Even though the plants can be placed pot to pot at planting, they need to be respaced as they grow over the edges of the pots. At shipping, the plants should be barely touching each other as crowding can create dead spots.

Week	Nutrient	ISP Soluble Plant Foods Recommended Dosage	Applied Dosage	Other notes, micronutrients, Ca, Mg
Initial Watering	20-20-20	300 ppm: (1.25 pounds per gallon stock solution)		Apply MetaCal or CalStore once per week from just after planting.
1 & 2	20-20-20	250 - 300 ppm: (1.04 - 1.25 pounds per gallon of stock solution)		Use clear water one day out of 7-10 days to reduce excess salt buildup. Add SiMag58 weekly. Check pH of media regularly.
3 to Full Color	17-4-17	200 - 250 ppm: (.98 - 1.23 pounds per gallon of stock solution)		Continue clear water once every 7-10 days to flush excess salts. Continue SiMag 58 weekly.
Full Color to Selling	17-4-17	100 ppm: (.49 pounds per gallon stock solution)		Add a pelleted, timed release fertilizer prior to shipping at the label rate.

Note on Fe in high pH: Even in ideal irrigation situations, it is not unusual to experience iron (Fe) deficiency in pot mums. The symptom appears as yellowing in young tissue. Apply a chelated Fe per the label rate as a pot drench. Be sure the media is wet before application and rinse any residue off of the leaves after application to reduce burns associated with drying Fe.



Mums benefit from extra Mg. While Epsom salts (MgSO₄) is often included in growing media, that dose is often spent after several weeks. Mg deficiency appears as an interveinal chlorosis on the lower leaves. Apply SiMag58 at 2 - 3 ounces per 100 gallons of solution every other week (or more often if needed). SiMag58 can be added to the regular fertigation nutrient package.



Mums require a relatively constant dose of calcium. Feed either MetaCal or CalStore after the regular NPK feeding or use two or more injectors in series with acid first, then NPK, then Ca-based fertilizer. At this lower Ca rate, the likelihood of creating calcium phosphate precipitates is substantially reduced. Apply weekly at 4 fluid ounces per gallon of stock solution using a 1/100 injector.

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