

MUM NUTRITION IN EXTREME CONDITIONS



Here are a few things to consider for your mum feed program if the Mother Nature decides to throw you a curveball.

Under extreme weather conditions, the best solution to managing your feed program starts with identifying your most limiting environmental and cultural factors. Are your crops being grown in a greenhouse or are they outdoors? On constant liquid feed or periodical feeding? Do you use a combination of controlled-release fertilizer (CRF) and water-soluble fertilizer (WSF) to grown your mums or just one of the two?

Cold Temperatures

- Temps below about 65F will induce premature flowering (a.k.a. crown budding). One of the best ways to counteract this effect is to push your crop with an ammonia-based fertilizer. Feed at 300+ ppm for several consecutive irrigations to push crops through the cold snap.
- Growers using primarily CRF may experience slower release of nutrients under colder growing conditions. Supplementing feed with WSF until soil temps can increase may be necessary. Also, too-cold irrigation water may impact CRF release kinetics, so use of tempered water is advised whenever possible.

High Temperatures

- Under high temp conditions, monitor your crop's roots and soil EC closely. If the EC gets too high, leach with clear water and retest or reduce your feed rate to avoid root damage.
- Root damage due to high EC opens the door for root-zone diseases to strike.

- High temps can cause CRF “dumping”, and your mums will end up getting a fertilizer overdose. This can encourage rapid leaf expansion or potentially burn your roots.
- Severe dry-down between irrigations can occur easily. For heavy-feeding crops like mums, this greatly increase the chance for fertilizer salt accumulation and root burn.

Heavy Rains

- Persistent rain on outdoor mums will flush available nutrients out of the growing media.
- For CRF users, replenishing these nutrients with WSF is critical to prevent nutrient stress (which can lead to crown budding).
- For any grower who encounters long periods of excessive rain, remember that a wet, well-fed mum is better than a wet, hungry mum. After any heavy rain event, be sure to pump your crops back up with feed, but monitor root health and treat for root rot
- Greenhouse growing means no rain flushing all the fertilizer out of your pots. However, prolonged low light and high humidity will reduce nutrient uptake, so monitor soil EC and reduce your feed slightly to avoid root burn.