

Garden Mum Crown Budding—2023 Rescue Plan (Week 31)

When the weather keeps beating your mums up, it's easy to feel like you've run out of options. However, there's almost always something you can do to combat adverse growing conditions, and turning your crop around effectively comes down to quick and decisive action. This week, we'll touch on strategies to combat late crown budding that resulted from wacky weather.



Air temperature in the mid- to low 60's often leads to crown budding. Physiological stress from low mineral nutrition, which often occurs during downpours and when extreme temperatures shut down nutrient uptake, also contributes to incidences of crown budding. While we've covered crown bud management strategies before (check out my past tip or our [TECH ON DEMAND DOCUMENTS](#) on the Ball Seed Garden Mums webpage), some growers have encountered two *or even three* flushes of crown buds this season. This has put quite a few growers into panic mode, so here are a few things to keep in mind if this has happened in your mums this summer:

- Any time crown buds occur, your next objective is to push dormant shoots out from below the buds to cover them up.
- The easiest thing to do when you see early signs of crown budding—both early *and late* in the production cycle—is hit the gas with an ammonia-based fertilizer. Apply 20-10-20 or even 20-20-20 (a few times) at 300+ ppm N and keep the pressure on until you see axillary shoots from below the buds push out.
- Between planting in June and around early- to mid-July, you *can* apply ethephon (Florel/Collate) to keep plants vegetative or help encourage lateral shoot breaks to push out. After mid-July, however, the risk of delaying flowering increases significantly. Ethephon is also not a PGR that I suggest inexperienced growers use and even under the best conditions, some varieties are very sensitive to it (can slow growth or delay flowering significantly). As such, this is generally not my go-to suggestion.

At this point (**week 31**), if you've recently encountered crown buds (or again for the 2nd or 3rd time), it may not be easy to finish with a stellar looking crop. But don't lose hope! Late- or repeat crown budding will likely mean your mums will finish a bit on the smaller side, but they are still salvageable. Do the following to give yourself the best shot possible at having a salable crop with strong flower power and a nice mounding habit, at finish:

1. Don't bother disbudding and absolutely do not pinch the crop. This is just a drain on your labor, and it will only slow the crop's recovery, which you cannot risk now.
2. Push to get one more flush of growth before we're solidly into natural short days. Increase feed again using an ammonia-based fertilizer like 20-10-20 for a few weeks and hold off on switching to a Cal-Mag, like we normally suggest after short days begin.
3. Get ahold of a GA-based PGR (Fascination or Fresco) and prepare to apply it once or twice. This will help get a little additional stretch on that final flush of vegetative growth and ensure that crown buds below are well covered-up. Check out our "GA for Garden Mums" guide on the Ball Mums webpage for more details.
4. Once plants have sized-up a bit more and true buds are set, begin toning the crop. Keep plants green with a Cal-Mag fertilizer once buds are initiated but start to leach with clear water once visible buds are set.
5. If you need to correct any general yellowing at this point, avoid adding nitrogen if possible. The old Epsom salts plus iron chelate drench trick works well, or you can apply a "holding feed" like a 0-7-5 with micronutrients to help get some green-up.
6. When plants have reached an acceptable size, tone them further with a light paclobutrazol drench. A 1 ppm drench should be enough to help toughen-up these relatively soft mums that you just pushed hard pretty much all the way to the finish line.

The Ball Tech On Demand team has helped growers through this process before and, while it's certainly a nail-biter, it can be done successfully if you act quickly. Keep in mind, this rescue protocol increases your input cost even further, so make sure the economics make sense before you implement it.