Thoughts on late-winter PGR applications
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A twitter conversation about late-winter PGR applications exploded last week. It started when I said that I applied PGRs to one of our new research greens last Saturday. I've been curious what happens when foliar and root-absorbed PGRs are applied to dormant turf for some time now. Apparently I wasn't the only one. Questions have flooded my phone and inbox from around the country this last week. Turf managers are seeing the annual bluegrass starting to break dormancy with these record-warm air temperatures, and they are trying to prevent the annual bluegrass outcompeting the dormant bent.

It's unlikely that managers are too worried about the early-season applications having a negative impact on their annual bluegrass. They are worried about the bentgrass, however, and so am I. There have been reports that winter PGR applications can slow spring green-up. Additionally, turf that went into winter with phytotoxicity from fall PGR apps look sunken and white compared to the other turf. I wish I had the answers. All I can do is design a couple experiments to see what happens with late-winter PGR applications on creeping bentgrass greens.

One objective of this research is to determine if PGRs impact spring green-up of creeping bentgrass when applied in either mid-February or mid-March. The other objective is to see if PGR class has an impact on spring green-up. To do this, we applied a root-absorbed class B, paclobutrazol (Trimmit 2SC) and two class A PGRs, trinexapac-ethyl (Primo Maxx) and prohexadione-Ca (Anuew), which are absorbed by the turf leaves and crowns.

Obviously we don't know the answer yet, but here are my best and worst case scenarios.

Best case: *The PGRs are absorbed by the annual bluegrass but not the creeping bentgrass. The creeping bentgrass then breaks dormancy as usual, and the annual bluegrass is held in check by the PGRs in the meantime. Alternatively, the class A products are absorbed into the dead bentgrass leaves and do not translocate to the crown. Again, bentgrass green up wouldn't be affected.*

Worst case: *All the turf absorbs the PGR and growth is reduced in the annual bluegrass but then rebounds sometime in mid-spring. The PGRs would also reduce spring green-up in creeping bentgrass and give the annual bluegrass a competitive advantage.*

We'll continue to watch the progress this year and keep everyone up-to-date with TurfiNfo. Until then, some superintendents are making test applications to small areas of fairways with heavy annual bluegrass contamination. They are including a check board to compare PGR performance during the spring. If you are interested in trying this on your course, please give me a call so we can document the green-up.

Another PGR that many are considering now is ethephon (Proxy) for control of annual bluegrass seed head emergence this fall. The "go-to" website for timing those first Proxy applications is http://GDDTracker.net from Michigan State University. The record-breaking weather has caused much of southern and eastern Nebraska to rapidly accumulate GDD. If the forecasts holds, first applications will likely be required by early March. While the weekend snow in northern Nebraska will likely influence application timing, current research indicates early applications are better for control. Monitor future Turf iNfo articles to monitor the progress towards the first Proxy application.

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