

Chemical removal of ryegrass

I am about to overseed my athletic fields with ryegrass for winter and spring play. My question relates to the management of this grass in the spring/summer next year. This last year, I had visible ryegrass well into July. There just did not seem to be enough time to get the bermudagrass established before fall sports started. I have heard about spraying out the overseed grass and was wondering if that would be beneficial for my fields. What are the pros and cons of chemical removal versus a more natural transition? Will the chemicals hurt the bermudagrass?

Tennessee

Transition occurs when dormant warm-season grasses begin to grow and compete with the established cool-season grasses. Traditional cultural practices to facilitate transition include reduced mowing height, increased fertility, verticutting, topdressing with sand, and use of selective herbicides. Temperature is a dominant factor facilitating transition, since it is responsible for the decline of cool-season grasses and the green-up of dormant warm-season grasses. It seems that the newer overseeded cool-season grass cultivars are more heat-tolerant and disease tolerant than many of the older cultivars. The improved tolerance of perennial ryegrass can result in it hanging around and competing with bermudagrass well into the summer months. Even after most of the ryegrass dyes out, "renegade" plants may remain.

Dr. A.J. Powell at the University of Kentucky told me that in the northern reaches of the transition zone, there is no such thing as natural transition from overseeded perennial ryegrass to bermudagrass. He further indicated that no amount of nitrogen fertilization, verticutting, scalping, etc., would ever kill the ryegrasses. In that area, they rely much more on chemical control to prevent the domination of the ryegrass. In the upper transition zone, ideal bermudagrass-growing weather only last for about 3 months (June, July, and August) and any competition greatly shortens that period. They can use other grasses, but feel that bermudagrass is their best sports turfgrass. To maintain it over time they must either omit overseeding or chemically remove the ryegrass in the spring or early summer.

Various herbicides and plant growth regulators (PGRs) have been tried through the years to try to hasten transition. Dr. Tim Murphy at the University of Georgia indicated, "the ideal chemical would be one that would kill or suppress the cool-season grass at the same rate that the bermudagrass greens-up." Several chemicals are currently labeled for reducing perennial ryegrass with no adverse effect on bermudagrass color or overall turfgrass quality. The products currently labeled include Kerb, Manor, and TranXit.

Dr. Bert McCarty at Clemson University indicated that these chemicals work but



are not foolproof. Depending on where you are located and your events' timing, most apply from mid-April (e.g., Florida) to mid-May (upper transition zone). Of course, for college sports (football) fields, these are often applied just after the Spring game. Dr. McCarty indicated that Kerb and Manor are very effective some years and others years they do not work as well. At this point no one seems to know exactly why. TranXit has not been available for very long, so it is too early to tell its performance consistency. At Florida, we noted that Manor was more effective at removing ryegrass in painted areas of the field than Kerb, which can be a significant issue on football fields.

Research has shown that generally, Manor and TranXit kill ryegrass faster than Kerb. There is also some indication that TranXit may be a little faster and a little more effective than Manor. For this reason, Dr. Murphy recommends Kerb for slower transitions where turf quality is of prime importance. It should be applied at the 50 percent green-up growth stage of bermuda. All three materials are slow (about 3 weeks) to work in (cooler) spring; thus, this can cause some timing issues. One should be well aware that once these products are applied, there is no undoing their damage to the cool-season grass. So, if your early spring turns out to be a late winter, then you can be left with thin bermudagrass (or worse, no bermudagrass) until it gets warm.

Economics

Naturally, there is an economic cost to using these products versus more natural methods. At this time, each of these products fits into a distinct price range, so that may be a driving decision which one you want to try. In the end, decision to use these products may depend on your location. In more southern areas, cultural practices typically result in a smooth transition. If you feel that the transition is taking too long, or you have too many "renegade" plants, you could apply Manor or TranXit for late-season transition. If you are further north and have limited time to grow in your dormant bermudagrass, then any of these three chemicals can effectively reduced perennial ryegrass density with no adverse effect on bermudagrass.

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Have Questions?

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