

# Timing of Roundup® Application Critical when Converting Golf Course Greens and Fairways to Roundup Ready® Creeping Bentgrass

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## ABSTRACT

Roundup Ready® creeping bentgrass (*Agrostis stolonifera* L.) may provide a management tool to control *Poa annua* L. infestation in putting greens and fairways. Unfortunately, conversion of existing golf course greens and fairways can take several months. The objective of this study was to determine the best timing for application of Roundup® (glyphosate) during conversion to Roundup Ready® creeping bentgrass to eliminate competition from conventional grasses. The study was conducted on an established 'Pennncross' creeping bentgrass green and on fairway areas of perennial ryegrass (*Lolium perenne* L.), Kentucky bluegrass (*Poa pratensis* L.) and creeping bentgrass. One plot in each replication was stripped of sod and Roundup Ready® creeping bentgrass was seeded into bare soil. The remaining plots were core aerified, verticut, and overseeded. All areas were seeded on 3 Sept. 2002. Treatments included applications of 593 g a.i. ha<sup>-1</sup> glyphosate at intervals before and after seeding. The best timing of Roundup® application for fairway conversion was in the period seven days before seeding to seven days after seeding. Applications after this period of time resulted in competition from conventional turf, thereby increasing the time required to achieve full cover of Roundup® Ready creeping bentgrass. It was determined that fairway areas seeded in late summer could be converted successfully and be open to play early the following spring. Conversion of greens using these methods, however, would require that the area remain closed for several months after seeding, therefore additional research is being conducted at Iowa State University to develop other conversion methods for greens.