EVALUATION OF DAZOMET FOR GOLF COURSE FAIRWAY RENOVATION

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Fumigation of annual bluegrass (*Poa annua* L.)-infested turf prior to seeding desirable turfgrass species can reduce stand contamination due to annual bluegrass seedling emergence. Dazomet (Basamid® Granular, BASF Corporation) is a soil fumigant labeled for turfgrass renovation. Little is known about dazomet efficacy on annual bluegrass seedling emergence, particularly when it is surface-applied. Field studies were conducted at The Pennsylvania State University to satisfy the following objectives: To determine (i) the effects of rate and plastic covering of surface-applied dazomet on annual bluegrass seedling emergence in turfgrass; and (ii) effective creeping bentgrass seeding intervals following surface applications of dazomet. Following late summer applications in 2000 and 2001, covering dazomet treatments with plastic sheets resulted in fewer annual bluegrass seedlings than in noncovered treatments. All plastic-covered dazomet treatments (388, 340, 291, and 194 kg ha^{-1}) provided greater than 98% reduction in annual bluegrass seedlings when compared with the plastic-covered controls. When not covered with plastic, the 388 kg ha^{-1} dazomet treatment provided 97% fewer annual bluegrass seedlings in 2000 and 92% fewer seedlings in 2001 than the noncovered controls. Results of the seeding interval experiment in 1999 and 2000 revealed that creeping bentgrass (*Agrostis stolonifera* L.) establishment was not inhibited when seeded 3 days after a surface application of dazomet in 1999 and 1 day after application in 2000. Creeping bentgrass clipping yields were greater in dazomet-treated plots compared to non-treated control plots at all seeding intervals indicating a surge in creeping bentgrass growth following dazomet applications.