

Evaluation of Proxy, Proxy + Primo, & Trimmit Growth Regulators Applied to a 'Providence' Creeping Bentgrass Putting Green for Phytotoxicity and Turf Quality

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The primary objective of this trial was to determine whether repeated applications (2, 3, or 4) of Proxy (ethephon) or Proxy + Primo (trinexpac-ethyl) caused phytotoxicity to 'Providence' creeping bentgrass maintained at putting green height. A secondary objective was to evaluate turf quality of putting green turf treated with Proxy, Proxy + Primo, or Trimmit (paclobutrazol) growth regulators. The trial was initiated on March 21, 2008 at the Lewis-Brown Horticulture Farm in Corvallis, Oregon. The site was a Providence creeping bentgrass putting green which was built in the mid 1990's on a 12 inch sand/compost mix. The green was mowed at 0.145 inches at the start of the trial and lowered slowly to 0.115 inches by the first part of June. Moderate injury occurred after 2 applications of Proxy applied alone and severe injury occurred after 3 applications (see photo at right). Applying Primo at 0.125 fl oz per 1,000 sq ft with Proxy lessened the damage slightly. Lowering the mowing height may have exacerbated the injury. There was no turf injury from the Trimmit PGR. However, Trimmit did darken the turf and caused the leaf blades to become wider over time. The leaf thickening became more prominent after 3 applications and decreased the turf quality slightly.

