

**Develop Bentgrass for Resistance to Snow Mold (*Typhula incarnata* Lasch)**  
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Controlled screening procedures for gray snow mold resistance were developed and performed on creeping bentgrass (*Agrostis palustris* Huds.) obtained from old Northern Michigan golf courses, on commercial creeping bentgrass cultivars 'L-93', 'Penn A4', 'Penn G2', 'Penncross', 'Providence', and 'Emerald', and for 40 plant introductions comprised of 14 species of *Agrostis* from 20 countries. Inoculation and infection was performed at 5°C and high humidity. Disease ratings were taken at the 4<sup>th</sup> and 6<sup>th</sup> week of infection in cold rooms and after three days in the greenhouse. Bentgrass recovery was rated after ten days in the greenhouse. This extensive evaluation of bentgrass species resulted in rapid evaluation and search for potentially resistant genotype. From replicated trials, we identified twenty creeping bentgrass genotype resistant to *Typhula incarnata* L. Although none of the commercial cultivars tested was found resistant, L-93 significantly recovered better than the others. Differences in the phenotypic expression, lesion growth and ability to recover suggest the polygenic nature of resistance. Screening procedures and different sources of resistance are important in future turfgrass breeding programs and for mapping resistance genes. The resistance genotypes were planted in Hancock Turfgrass Research Center and several golf courses for further evaluation.