Working Outline of Best Management Practices for Anthracnose Control on 
*Poa annua* Putting Green Turf

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Our current findings indicate that nitrogen fertilization and mowing height are the most influential cultural practices affecting anthracnose severity in annual bluegrass putting green turf. N deficient turf and lower mowing predispose turf to anthracnose and compromise its ability to recuperate from disease damage. Other practices that we have studied such as the application of plant growth regulators, irrigation, lightweight rolling, topdressing, and foot traffic can also affect this disease.

**Nitrogen**

- Nitrogen should be applied to maintain vigor of putting green turf without overfertilizing. An annual nitrogen program N that includes frequent low rate applications during summer months will reduce anthracnose incidence and severity.

- Applying greater cumulative amounts of soluble-N in a light, frequent program (up to 1.2 lbs N 1000 ft$^2$ or 59 kg ha$^{-1}$) during the summer months can reduce anthracnose.

- Beginning light, frequent soluble-N programs as early as May before the onset of anthracnose will provide better suppression of anthracnose severity during the summer than initiating a soluble-N program in June when disease develops.

**Mowing and Rolling**

- Mowing below 0.125-inch (3.2-mm) with fixed-head reel mowers should be avoided. If feasible, raise the cutting height as high as 0.141-inch (3.6-mm) for greater suppression of anthracnose. Slight increases in mowing height (as little as 0.015-inches) can significantly reduce the severity of this disease. However, the critical height for flex-head mowers has not been determined.

- Roll and/or increase mowing frequency to maintain ball roll distances at higher mowing heights. Rolling and double-cutting increase ball roll distance (green speed), but will not enhance the disease.

- Rolling every other day can result in a subtle decrease in anthracnose severity, regardless of roller type.
**Plant Growth Regulators**

- Routine trinexapac-ethyl use even at high rates and short intervals should not intensify and may reduce anthracnose severity by improving turf tolerance to low mowing and enhancing plant health.
- Mefluidide and ethephon can be used to suppress seedhead formation in annual bluegrass turfs without increasing anthracnose.
- Mefluidide or ethephon applied in March or April at label rates with subsequent applications of trinexapac-ethyl at 0.125 fl. oz. 1000 ft\(^2\) (0.40 L ha\(^{-1}\)) every 7- to 14-d or 0.100 fl. oz. 1000 ft\(^2\) (0.32 L ha\(^{-1}\)) every 7-d should not intensify and may reduce anthracnose severity while providing the best turf quality.

**Irrigation**

- Increased anthracnose can result when annual bluegrass is consistently subjected to wilt stress or excessively wet conditions.
- Irrigating to replace 60 – 80% of potential evapotranspiration and hand watering as needed to minimize drought stress will provide quality playing conditions and reduce conditions favorable for anthracnose.
- Correct drainage problems in low-lying areas of putting greens surfaces.

**Topdressing**

- Weekly or bi-weekly sand topdressing with 1 or 2 ft\(^3\) 1000 ft\(^2\) (0.3 or 0.6 L m\(^{-2}\)), respectively, provides a protective layer of sand around the crown which slightly raises the effective height of cut thus reducing anthracnose.
- Anthracnose does not appear to be affected by different sand incorporation techniques, so methods which best incorporate sand without severely damaging the turf should be selected to minimize turf injury and wear on mowing equipment.
- Foot traffic can reduce anthracnose, regardless of sand topdressing. Benefits of sand topdressing are seen through better wear tolerance and decreased disease in areas that receive daily foot traffic and sand topdressing.

Feb 19, 2010 Update