

Divot resistance in golf course turfgrass

August 10 2011

Golf courses, known for their calm scenic views and precise grass patterns, take daily abuse. Divots created by golf strokes are a common occurrence, and can be a costly problem for golf course maintenance operations. Although previous research has identified differences in divot recovery across species of bermudagrass and zoysiagrass, little is known about divot resistance.

Scientists at Purdue University and the University of Arkansas evaluated 12 cultivars of bermudagrass and zoysiagrass in a [field experiment](#) conducted in Fayetteville, Arkansas. Two golfers each hit three [golf balls](#) on each plot. The divots created by their shots were rated visually for divot type and severity, and the volume of displaced soil was measured.

The primary objective of this experiment was to quantify the divot resistance for various turfgrass cultivars. Researchers also compared evaluation methods for quantifying divot resistance. This study was published in the July/August 2011 issue of [Crop Science](#).

'Riviera' bermudagrass allowed the largest volume per divot, while the smallest divots were observed with 'Cavalier', 'Diamond', and 'Zorro' zoysiagrass. The four methods used to evaluate divot resistance provided similar findings among the different [grass](#) cultivars and species tested.

"Due to the ease and speed as well as lower measurement variability of evaluating divot resistance, a visual rating for divot severity or a Turfgrass Shear Tester are recommended for future work in divot resistance," explained Jon Trappe, a Purdue professor and the author of

this study.

The results from this study demonstrate the differences and similarities in divot resistance that exist among various grass cultivars. Cultivars that are more resistant to divoting can help reduce maintenance inputs and costs. The research also demonstrates the need for evaluating the combination of resistance and recovery of divoting, as some grass cultivars have both improved resistance and recovery.

More information: The full article is available for no charge for 30 days following the date of this summary. View the abstract at www.crops.org/publications/cs/articles/51/4/1793

Provided by American Society of Agronomy

Citation: Divot resistance in golf course turfgrass (2011, August 10) retrieved 26 April 2024 from <https://phys.org/news/2011-08-divot-resistance-golf-turfgrass.html>

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