



# Super Science

## // IPHONES ON THE GOLF COURSE

### MEASURING GREEN SPEED IS THERE REALLY AN APP FOR THAT?

By Marcus Jones, Ph.D.

**M**any superintendents record green speed and use this data to tailor agronomic practices. Typically superintendents use a Stimpmeter to get speed measurements.

The iStimp is a recent application supported by iOS devices such as the iPod Touch, iPhone and iPad. The iStimp is available to anyone who has an iOS device for a fee of \$0.99. A green speed measurement is obtained by rolling a golf ball off the iOS device and measuring the distance the ball travels with a built-in ruler. The iStimp application then uses algorithms to generate a Stimpmeter value. A comparison of the iStimp on the iPad, iPhone and iPod touch has not been conducted. The objective of this study was to determine the accuracy of the iStimp application compared to the USGA Stimpmeter.



Researchers in Iowa and Indiana put the iStimp to the test. The results were less than stellar.

The research Stimpmeter produced a statistically similar reading of 11.8 feet. Research Stimpmeters have proven to yield green speed values similar to the USGA device. The three iOS devices equipped with the iStimp app failed to produce Stimpmeter values similar to the USGA device. The iStimp application when utilized on the iPad 2 underestimated Stimpmeter readings by 9 percent. In contrast, the iStimp application overestimated Stimpmeter readings on the iPhone 4 and iPod touch 4th Generation by 21 percent and 16 percent, respectively.

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Stimpmeter measurements were recorded on putting greens at two different golf courses with medium and fast green speeds according to USGA green speed definitions. Stimpmeter readings were obtained with the three iOS devices and a USGA Stimpmeter. A research Stimpmeter, which is known to produce equivalent results to the USGA device, was also included. Three people, each with varying experience using Stimpmeters, operated each device. All accessories (cases, etc.) were removed from each iOS device with the exception of screen protectors.

## NEWS UPDATE

### BASF PREVIEWS TWO NEW FUNGICIDES

During the recent American Phytopathological Society annual conference BASF discussed research regarding two fungicides the company expects to receive EPA registration on this fall: Xzemplar fungicide and Lexicon Intrinsic brand fungicide. Both contain the active ingredient fluxapyroxad, while Lexicon Intrinsic brand fungicide also contains pyraclostrobin.

Tested in trials during 2008-2013, the research shows that Xzemplar and Lexicon provide consistent, long-lasting protection against a broad range of turf diseases.

"The research indicates that the new active ingredient fluxapyroxad is absorbed



quickly and evenly transported into turf leaves," said Renee

Keese, Ph.D., Biology R&D Project Leader, BASF. "The consistent uptake and delivery provide preventative and early curative disease control."

Both products are expected to be available for sale in spring of next year.

## “SUPERINTENDENTS

ACROSS THE COUNTRY  
ARE STRUGGLING  
WITH THIS ISSUE  
AND THEY DO NOT  
EVEN KNOW IT.”

**Scott McElroy, Ph.D., on herbicide resistant annual bluegrass.**

(see full story on page 34)