## **Real World Science** Focused for Superintendents

fter more than three years of turf research Intrinsic brand fungicides from BASF delivered golf course superintendents an industry-first in 2010: fungicides labeled for disease control and plant health benefits.

Based on the proprietary active ingredient pyraclostrobin, Insignia SC Intrinsic brand fungicide and Honor Intrinsic brand fungicide from BASF provide broad spectrum control of the top diseases challenging turfgrass playability as well as plant health benefits that help turf to better withstand stresses from the inside out.

But the real benefit is below ground.

While the surface of turfgrass treated with an Intrinsic brand fungicide may not appear any different than turfgrass treated with other fungicides, including other strobilurin class fungicides, the roots and plant systems treated with Intrinsic brand fungicides show a substantial improvement in overall health.

BASF research shows pyraclostrobin primes the plant's immune system before a stress event occurs, which helps the turf endure and overcome the event through root retention. In addition, it helps the plant operate more efficiently and effectively, making the turf more able to withstand disease and environmental stresses, including drought, moisture, temperature ex-



**BY THAVY STAAL** 

tremes, as well as mechanical stress, such as aeration.

Speaking of aeration, BASF worked with superintendents across the U.S. last spring and summer to better understand the effects of Honor Intrinsic brand fungicide on turf root systems. Superintendents were asked to time the fungicide application for preventative disease control and prior to a stress event such as aeration in order to benefit from the plant health effects of Honor Intrinsic. Root cores were pulled and sent for analysis using a root scanning system called WinRHIZO. Not surprising, results paralleled that of greenhouse research - turf treated with Honor Intrinsic brand fungicide resulted in increased total root length compared to standard treatments.

BASF will be conducting more real world research this spring and summer that focuses on the effects of turf root systems from additional stress factors such as temperature extremes. Our research shows turf treated with Intrinsic brand fungicides are less sensitive during drought by moderating temperature of leaves and canopy and can be visualized via infrared photo.

One can only guess what the 2011 season will bring but two things are certain: after turf breaks from its dormancy, turf stresses will follow. And when used in an integrated pest management program, Insignia SC Intrinsic and Honor Intrinsic manage disease, enable plant health and help to reduce labor costs, which all help superintendents sleep easier at night.

BASF science helps superintendents get more out of their disease control program investments. Consider incorporating an Intrinsic brand fungicide into your disease prevention and treatment program, and share your disease control and plant health results with our team.

Learn more about Intrinsic brand fungicides at www.Intrinsic-PlantHealth.com and other BASF Professional Turf & Ornamentals innovations at www.betterturf.basf.us.

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