

## **Guelph Turfgrass Institute Annual Research Report 2007 (Volume 21)**

### **Table of Contents**

Contents	Page Number
<b>TURFGRASS MANAGEMENT</b>	
<b>Effect of the Inoculation with Myke® Mycorrhizal Inoculant on Grass Survival and Growth During Water Stress</b>	
E.Lyons, K. Jordan, K.Carey, E.Gunn, A.Porter.....	1
<b>Performance of Granular Fertilizer on Creeping bentgrass Fairway Turf - 2007 Season</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	13
<b>Performance of Fertilizers on low-cut Kentucky bluegrass Turf (Sponsor: Agrium Advanced Technologies)</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	20
<b>Performance of Fertilizers on low-cut Kentucky bluegrass Turf (Sponsor: Innovative Hort Solutions, LLC)</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	30
<b>Performance of Fertilizers on Creeping bentgrass Putting Green Turf</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	41
<b>Performance of Fertilizers on Creeping bentgrass Fairway Type Turf</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	51
<b>Effects of Worm Casting Product on Germination, Establishment, and Shoot and Root Growth of Kentucky bluegrass, Perennial ryegrass and Creeping bentgrass</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	63
<b>TURFGRASS WEED CONTROL</b>	
<b>Efficacy of PC Turf Herbicide Product (Ready-to-use and Concentrate) using Homeowner Applicators on Dandelions, Plantains and Clover</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	72
<b>Efficacy of PC Turf Herbicide Product (Concentrate and Ready-to-use) at Different Application Rates</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	77
<b>Efficacy and Phytotoxicity of Various PC Turf Herbicide Products using on Dandelions, Plantains and Clover in Mixed Turfgrass Maintained as Home Lawn</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	84

## **DEVELOPMENT AND EVALUATION OF TURFGRASS SPECIES AND CULTIVARS**

<b>National Turfgrass Evaluation Program 2005 Kentucky bluegrass cultivar trial - 2007 data</b>	
E.Lyons, K.Jordan, K.Carey, and A.Porter.....	90

## **TURFGRASS ENTOMOLOGY**

<b>Efficacy and Crop Tolerance Evaluation of V-10170 Insecticide for the Preventative Control of European cranefly (<i>Tipula paludosa</i>) Larvae in Creeping bentgrass Fairway Turf</b>	
E.Lyons, K.Jordan, K.Carey, P.Charbonneau, and A.Porter.....	96

## **TURFGRASS EXTENSION**

<b>Efficacy of Entomopathogenic Nematodes and Lamda-Cyhalothrin for Control of European Cranefly (<i>Tipula paludosa</i>) Larvae in Creeping bentgrass Fairway Turf Applied in the Late Spring</b>	
P.Charbonneau.....	102

<b>Efficacy of Lamba-cyhalothrin for Control of European Cranefly (<i>Tipula paludosa</i>) Larvae in Creeping bentgrass Fairway Turf when Applied in the Fall</b>	
P.Charbonneau.....	104

<b>Efficacy of Entomopathogenic Nematodes for Control of European Cranefly (<i>Tipula paludosa</i>) Larvae in Creeping bentgrass Fairway Turf when Applied in the Fall</b>	
P.Charbonneau.....	106

<b>Moss Control Trials on Putting Greens, 2004-2006</b>	
P.Charbonneau.....	109

<b>Turf Extension Report 2006</b>	
P.Charbonneau.....	119

<b>Turf Extension Report 2007</b>	
P.Charbonneau.....	123

## **TURFGRASS PATHOLOGY**

<b>Biocontrol Trials for Dollarspot Disease Controls, Summer 2007</b>	
T. Hsiang and L.Tian.....	126

<b>Biocontrol Trials for Dollarspot Disease Controls, Summer 2007-Fairway Height</b>	
T. Hsiang and L. Tian.....	128

<b>Compost Tea for Control of Dollar Spot</b>	
T. Hsiang and L. Tian.....	130

<b>Control of Dollar Spot with Molasses and Hydrogen Peroxide</b>	
T. Hsiang and L. Tian.....	136

<b>Microbial Communities in the Turfgrass Phyllosphere</b>	138
D. Benedetto and T. Hsiang.....	
<b>Antifungal Activity of Reworks Wormcast</b>	140
T. Hsiang and L. Tian.....	
<b>Microbial Analyses of Wormcast</b>	146
T. Hsiang and L. Tian.....	
<b>Snow Mold Disease Control on Creeping bentgrass, Wormcast Report (2007/5/15)</b>	149
T. Hsiang and L. Tian.....	
<b>Snow Mold Disease Control on Kentucky bluegrass, Wormcast Report (2007/6/4)</b>	153
T. Hsiang and L. Tian.....	
<b>Wormcast Trials for Dollar spot Disease Control Summer 2007</b>	155
T. Hsiang and L. Tian.....	
<b>Anthraenose of Turfgrass: What is it, and how does it get into the plant?</b>	157
T. Hsiang.....	
<b>All you ever wanted to know about Fusarium patch \ Microdochium patch \ Pink snow mold or whatever that disease is called</b>	161
T. Hsiang.....	
<b>Neurotic about Necrotic Ring Spot?</b>	169
T. Hsiang.....	

## OTHER RESEARCH

<b>Predicting the Biological Impacts of Climate Change; and the Ecological Effects of Endophytic Fungi</b>	173
J. Newman.....	