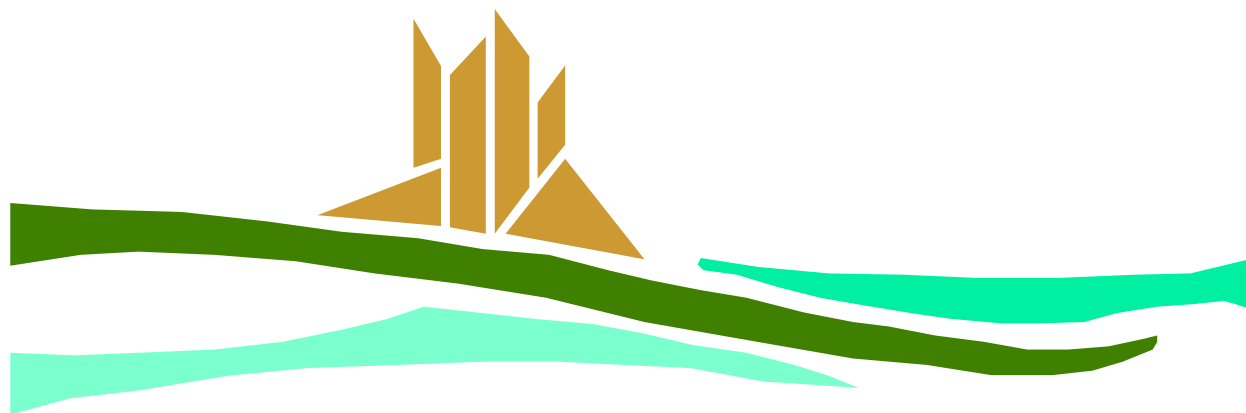


1997 RESEARCH REPORT



GUELPH TURFGRASS INSTITUTE

ONTARIO AGRICULTURAL COLLEGE
UNIVERSITY OF GUELPH


produced in cooperation with  the Ontario Turfgrass Research Foundation

Table of Contents

Contents Page number

Foreword And Acknowledgements

Rob Witherspoon

DEVELOPMENT AND EVALUATION OF TURFGRASS SPECIES AND CULTIVARS

Turfgrass Variety Evaluation: 1997 Progress Report

S.R. Bowley and D. Hancock 1

TURFGRASS MANAGEMENT

Guelph Turfgrass Institute 1997 Fertilizer Performance Trial: Performance of Fertilizers on Penncross Creeping Bentgrass USGA Putting Green Turf

Ken Carey, Guelph Turfgrass Institute 15

Guelph Turfgrass Institute 1997 Fertilizer Performance Trial: Performance of Fertilizers on Kentucky Bluegrass Turf

Ken Carey, Guelph Turfgrass Institute 26

Field Evaluation of Primer Granular Formulation - 1997 Season

Ken Carey 34

Effect of Infiltration Rates Following Application of Infiltrix - 1997 Season

Ken Carey 43

Field Evaluation of Infiltration Rates of Infiltrix Solutions - 1997 Season

Ken Carey 46

Performance of Ecoval Products on "Penncross" Creeping Bentgrass USGA Putting Greens: 1997 Trial / 1997 Results.

Ken Carey 48

Performance of Ecoval Products on "Penncross" Creeping Bentgrass USGA Putting Greens: 1996 Trial / 1997 Results.

Ken Carey 57

Effects of Terra-control Soil Amendment on *Germination, Establishment, And Performance* of Kentucky Bluegrass, Perennial Ryegrass, Fine Fescue, And Tall Fescue.

Ken Carey 66

Effects of Terra-control Soil Amendment on *Soil Stability* of Seeded Kentucky Bluegrass, Perennial Ryegrass, Fine Fescue, and Tall Fescue Populations.

Ken Carey 74

ENVIRONMENTAL RESEARCH

Comparison of Electronic Leaf Wetness Sensors for Measurement of Dew Duration on Creeping Bentgrass: Summer 1997	
Brenda Walsh, Terry J. Gillespie and Greg J. Boland	81
Emissions of Nitrous Oxide and Nitrogen Oxide From Turfgrass As Affected by Type of Nitrogen Fertilizer	
Selma Maggiotto and Claudia Wagner-Riddle	86
Assessment of the Environmental Fate and Biological Effects of Trichloroacetic Acid (TCA), Trifluoroacetic Acid (TFA) and Related Haloacetic Compounds in Field Enclosures (Microcosms).	
M. Hanson, C. Marwood, K.R. Solomon, D. Muir, S. Mabury, and P.K. Sibley ..	89
Use of Microcosms to Validate Probabilistic Risk Assessment Procedures for Ecotoxicological Risk Assessment of Mixtures of Organophosphorus Insecticides.	
Mark J. Chappel, Tara George, Keith R. Solomon, John Struger, Karsten Liber, and Paul K. Sibley	93
TURFGRASS PATHOLOGY	
Evaluation of Bio-trek 22G and Bio-trek Sprayable (<i>Trichoderma harzianum</i>) Treatments for Suppression of Dollar Spot	
M.J. Melzer and G.J. Boland	97
Chemical Trials For Snow Mould Disease Control December 1996 - April 1997	
S. Cook and T. Hsiang	101
Chemical Trials for Dollar Spot Disease Control Summer 1997	
S. Cook and T. Hsiang	104
Chemical Trials for Fusarium Patch Disease Control Fall 1997	
S. Cook and T. Hsiang	107
Resistance of Kentucky Bluegrass Cultivars to Necrotic Ring Spot	
T. Hsiang and G.A Chastagner	110
Control of Grey Snow Mould with <i>Typhula Phacorrhiza</i> Summary Report for 1997	
Tom Hsiang, Chunren Wu, Lin Yang and Leon Liu	111
Relative Virulence of Isolates of <i>Sclerotinia homoeocarpa</i> With Varying Sensitivity to Propiconazole	
Tom Hsiang, Lin Yang and Wayne Barton	112

TURFGRASS EXTENSION

1997 Turfgrass Extension Seasonal Summary

Pam Charbonneau 113

NURSERY PRODUCTION

Tree Growth and Quality in Response to Different Rates of Soil Injected Slow Release Fertilizers

Ligita Taurins and Glen Lumis 117

Growth and Quality of In-ground Container Grown Trees Using Different Rates of Controlled Release Fertilizers

Ligita Taurins and Glen Lumis 119

VEGETATION MANAGEMENT

Lowbush Blueberry Vegetation Management: Research Update, September 1997

Dr. Dave Percival and Mr. N. McCollum 123