

Sunday, July 12, 2009

8:00 - 4:00 **SON Executive Board Meeting** - Boulder Society

12:00 - 9:00 **Poster Setup** - Livak Ballroom/Chittenden/Handy

SON/SES Workshop 1

Toward Learner-Centered Soil Ecology Education:
Integrating Research and Experiential Activities Into Teaching
1:00 – 3:45
Jost

SON/SES Workshop 2

Assessing Diversity of Microbiota Through Ultra-sequencing:
Approaches, Advantages and Pitfalls
1:00 – 3:45
Williams

This is an open discussion session where questions and comments will be entertained throughout the session. The following people will prepare introductory materials and lead discussions on these topics.

1:00 INTRODUCTORY REMARKS
Robin M. Giblin-Davis (10-15 minutes)

METAGENETICS; NEMATODE CONTROL DATASET: LOCUS
SELECTION AND PRIMER CHOICE; PRELIMINARY ASSESSMENT OF
DIVERSITY AND ABUNDANCE; OTHER TAXA OF MEIOFAUNA
Dorota Porazinska (30 minutes)

BIOINFORMATICS NUTS AND BOLTS...THE OPERATIONAL CLUSTER
TAXONOMIC UNIT PIPELINE
Way Sung (30-45 minutes)

OCTUS VS SPECIES; CHIMERAS AND OTHER ARTIFACTS;
ENVIRONMENTAL SAMPLES.
Dorota Porazinska (30 minutes)

CONCLUDING REMARKS
Kelley Thomas (10-15 minutes)

2:00-4:00 **Afternoon Break**

3:15-3:45 **Meeting with Session Chairs** - Livak Fireplace Lounge

Welcome and Plenary Session

4:00 – 6:00

Silver Maple

4:00 Introductions and Welcome

Deb Neher, Chair of Local Arrangements, Professor and Chair, Department of Plant and Soil Science, University of Vermont

4:05 Introduction and Welcome

Tom Vogelmann, Dean, College of Agriculture and Life Sciences, University of Vermont

4:20 THE MYTH OF PROGRESS: TOWARD A SUSTAINABLE FUTURE

Tom Wessels, Core Faculty, Antioch University New England

5:00 HERODOTUS OF HALICARNASSUS, NEMATODE COMMUNITY
STRUCTURE AND THE LAW OF ENTROPY

George Bird, Professor, Michigan State University

5:30 GLOBAL CHANGE AND SOIL FUNGI: SUSTAINING THE WOOD-WIDE
WEB IN NORTHEASTERN FORESTS

Serita Frey, Associate Professor, University of New Hampshire

6:00-7:00 **Book Signing with Tom Wessels**

6:00-9:00 **Joint Society Presidents' Welcome Reception &
Bluegrass Band**

Monday, July 13, 2009

SON/SES Symposium 1

Managing the Health of Natural and Managed Soil Ecosystems Through Integrated Understanding of Their Biophysical, Physiochemical and Biological Properties

8:00 – 9:30

Silver Maple

Conveners: Haddish Melakeberhan and Josef Görres

- 8:00 FORMS AND FUNCTIONS OF MESO AND MICRO-NICHE CAPACITIES WITHIN SOIL AGGREGATES
Smucker, Alvin, E. Park, W. Wang, W. Sul and M. Rivers
- 8:30 BACTERIVOROUS NEMATODE POPULATION DYNAMICS IN A PORE NETWORK MATRIX MODEL
Weicht, T. R., J. Görres, D. L. Moohead and D. A. Neher
- 8:50 PARTITIONING OF HABITABLE PORE SPACE IN EARTHWORM BURROWS
Görres, Josef H. and J. A. Amador
- 9:10 CONTROLS ON SOIL CARBON SEQUESTRATION
Morris, Sherri J., E.A. Brewer and E.A. Paul

SES Paper Session 1

Response of Soil Communities to Changes in Climate

8:00 – 9:30

Sugar Maple

Convener: Rachel Thiet

- 8:00 EXPLORING MECHANISMS THAT MAY EXPLAIN THE RESPONSE OF SOIL RESPIRATION TO LONG-TERM WARMING
Bradford, Mark
- 8:15 SEASONAL VARIATION IN MICROBIAL AND BIOGEOCHEMICAL PROCESSES IN CHRONICALLY WARMED AND FERTILIZED SOILS
Contosta, Alexandra, S.D. Frey, and M.A. Knorr
- 8:30 MICROBIAL BIOMASS AND RESPIRATION RESPONSES TO NITROGEN FERTILIZATION IN A POLAR DESERT
Ball, Becky A. and R.A. Virginia

- 8:45 MICROBIAL FUNCTIONAL DIVERSITY PROFILES IN RESPONSE TO SIMULATED NITROGEN DEPOSITION AND VARIABLE PRECIPITATION IN THE CHIHUAHUAN DESERT, BIG BEND NATIONAL PARK, TX
Grizzle, Heath W., Van Gestel, N., Robertson, T, Tissue, D. and J.C. Zak
- 9:00 TEMPORAL DYNAMICS OF THE MICROBIAL RESPONSE TO A TWO-YEAR RAIN EXCLUSION
Landesman, William J. and J. Dighton
- 9:15 INDIRECT EVIDENCE FOR REDUCED ENZYME TURNOVER UNDER EXPERIMENTAL DROUGHT AT THE BOSTON AREA CLIMATE EXPERIMENT
Steinweg, J. Megan and M. D. Wallenstein

9:30-10:00 **Morning Break**

SON/SES Symposium 1- *continued*

Managing the Health of Natural and Managed Soil Ecosystems Through Integrated Understanding of their Biophysical, Physiochemical and Biological Properties

10:00 – 12:00

Silver Maple

Conveners: Haddish Melakeberhan and Josef Görres

- 10:00 CONTRIBUTION OF NEMATODES TO THE STRUCTURE AND FUNCTION OF THE SOIL FOOD WEB
Ferris, Howard
- 10:25 EARTH'S FRAGILE SYSTEMS: THE MACHAIR OF SCOTLAND – A CASE STUDY
Vink, Stefanie N, T. Daniell, D. Robinson, and **R. Neilson**
- 10:50 NITROGEN FERTILIZER EFFECTS ON SOIL COMMUNITIES AND DECOMPOSITION DYNAMICS IN AGRICULTURAL SYSTEMS
Grandy, A. Stuart, K. Wickings, and N. Fierer
- 11:10 CROSS-DISCIPLINARY EFFICIENCY ASSESSMENT OF SOIL AMENDMENTS
Melakeerhan, Haddish

SES Paper Session 1- *continued*

Response of Soil Communities to Changes in Climate

10:00 – 11:30

Sugar Maple

Convener: Mark Bradford

- 10:00 SOIL MOISTURE DISTURBANCE INFLUENCES MICROBIAL
COMMUNITY FUNCTION AND STRUCTURE WITH IMPACTS ON SOIL
CARBON AND NITROGEN DYNAMICS
Tiemann, L. K. and S. A. Billings
- 10:15 LINKING ABOVE AND BELOWGROUND RESPONSES TO GLOBAL
CHANGE AT COMMUNITY AND ECOSYSTEM SCALES
Antoninka, Anita, J. Wolf, M. Bowker, A.T. Classen, and N.C. Johnson
- 10:30 RELATIONSHIPS BETWEEN INVERTEBRATE HABITAT PREFERENCE,
STREAM FLOW AND DIEL TEMPERATURE FLUCTUATION IN AN
ANTARCTIC MELTWATER STREAM
Simmons, B.L., B.J. Adams, D.M. McKnight and D.H. Wall
- 10:45 LONG-TERM EFFECTS OF ELEVATED CO₂ AND O₃ ON
EXTRAMATRICAL MYCORRHIZAL HYPHAL BIOMASS PRODUCTION
AND STANDING CROP IN QUAKING ASPEN
Miller, Michael
- 11:00 CLIMATE PATTERNS DETERMINE SOIL ORGANIC MATTER DYNAMICS
AND ASSOCIATED FUNGAL CARBON RESPIRATION
Oren, Adi and Y. Steinberger
- 11:15 DISCUSSION

SON Paper Session 1
Host Parasite Interactions
10:00 – 11:30
Jost
Convener: Inga Zasada

- 10:00 CHANGES IN PROTEIN CONTENT AND ENZYMATIC ACTIVITY OF
TOMATO PLANTS IN RESPONSE TO NEMATODE INFECTION
Abd-Elgawad, Mahfouz, M. M. Sanaa, S. A. Kabeil and **A. E. Abd El-Wahab**
- 10:15 ASSESSING THE POTENTIAL DRUGABILITY OF Hp-FAR-1, FROM A FAR
PROTEIN FAMILY SPECIFIC TO THE PHYLUM NEMATODA
Bath, Jennifer L., J. J. Drees, E. Maetzold, M. D. Scheidt, M. E. Knox, D. Ram,
P. Eneh, and C. J. Clark
- 10:30 HOST-PARASITE RELATIONSHIP OF *MELOIDOGYNE INCOGNITA* AND
EPAZOTE
Bernard, Ernest C., and P. J. Long

10:45 ANALYSIS OF TWO TRANSCRIPTION FACTORS THAT ARE
UPREGULATED IN EARLY NEMATODE FEEDING SITES
Gheysen, Godelieve and W. Grunewald

11:00 PATHOGENICITY OF PLANT-PARASITIC NEMATODES ON BLUEBERRY
Zasada, Inga A., J. N. Pinkerton, and T. A. Forge

11:30-1:00 **Lunch**

12:30-12:45 **SON Society Photograph**
Davis 2nd Floor Stairwell

12:45-1:00 **SES Society Photograph**
Davis 2nd Floor Stairwell

SON Symposium 1

Comparative Genomics of Parasitic Nematodes

1:00 – 3:00

Silver Maple

Convener: Charles Opperman

1:00 PLANT NEMATODE GENOMICS: LOOKING BACK AND MOVING
FORWARD
Opperman, Charles H., D. McK. Bird, E. S. Scholl, and M. Burke

1:20 CONNECTING THE GENETIC AND PHYSICAL MAPS OF THE MODEL
ROOT-KNOT NEMATODE *MELOIDOGYNE HAPLA* AND MAPPING A
TRAIT FOR AGGREGATION
Williamson, Valerie M., J. Schaff, S. Fudali, V.P. Thomas, and C. Wang

1:40 A COMPARATIVE GENOMICS APPROACH TO EXAMINING VARIATION
BETWEEN STRAINS AND SPECIES OF MELOIDOGYNE (ROOT-KNOT
NEMATODE)
Schaff, Jennifer E., V. M. Williamson, E. Scholl, and C. H. Opperman

2:00 **Scott, Alvin**

2:20 PHYLOGENOMIC ANALYSES IN THE AGE OF NEXT-GEN
SEQUENCING: THE SCOURGE OF GENE DUPLICATION AND THE USE
OF TRANSCRIPTOME DATASETS
Thomas, W. Kelley, K. Morris, and P. J. Hatcher

- 2:40 EVOLUTION OF PARASITIC ABILITY IN A PLANT-PARASITIC NEMATODE: HORIZONTAL GENE FLOW, GENE DIVERSIFICATION AND CONVERGENT EVOLUTION
Bird, David McK., C. H. Opperman, E. S. Scholl, J. Cromer, P. DiGennaro, M. Goshe, and D. Nielsen

SES Symposium 1

Natural Disturbances and Soil Ecology: Fire, Flood, and Hurricane

1:00 – 3:00

Sugar Maple

Convener: Mac Callaham

- 1:00 INTRODUCTION AND OPENING REMARKS
Callaham, Mac
- 1:10 IF YOU CAN GET THEM TO HEAR YOU, WILL THEY ACTUALLY LISTEN?
Boerner, Ralph, S. Hart, K. Outcalt, C. Skinner, S. Stephens, T. Waldrop, D. Yaussy and A. Youngblood
- 1:30 HOW GENERAL IS THE CURRENT PN CONTROLS ON CO₂ FLUX PARADIGM?
Mitchell, Robert. J., B. Mortazavi, and J. O'Brien
- 1:50 FIRE AND FUNGI IN THE TALLGRASS PRAIRIE: RESULTS FROM LONG-TERM STUDIES AT KONZA PRAIRIE BIOLOGICAL STATION.
Wilson, Gail W. T.
- 2:10 USING NMR TO UNDERSTAND THE ECOLOGICAL ROLES OF CHARCOAL
Masiello, Caroline A. and W. C. Hockaday
- 2:30 EFFECTS OF HURRICANE DISTURBANCE ON SOILS IN A CHANGING WORLD
Stanturf, John A., S. L. Goodrick, M. A. Callaham, Jr. and J. J. O'Brien
- 2:50 CLOSING REMARKS AND QUESTIONS

SON Paper Session 2

Entomopathogenic Nematodes

1:00- 3:00

Jost

Conveners: Robin Giblin-Davis and Parwinder Grewal

- 1:00 TRANSCRIPTIONAL AND BIOLOGICAL DIFFERENCES IN TWO CLOSELY-RELATED STRAINS TTO1 AND GPS11 OF *HETERORHABDITIS BACTERIOPHORA*
Bai, Xiaodong, R. An, U. Uslu, and P. S. Grewal
- 1:15 GROWTH OF CITRUS SEEDLINGS IN 3 SOILS WITH COMBINATIONS OF WEEVIL HERBIVORES AND ENDEMIC SPECIES OF ENTOMOPATHOGENIC NEMATODES
El-Borai, Fahiem E., R. J. Stuart and L. W. Duncan
- 1:30 HEAT AND DESICCATION TOLERANCE OF LINES OF ENTOMOPATHOGENIC NEMATODES
Ruiz-Vega, Jaime, and F. Ruiz-Carballo
- 1:45 APPLICATION OF ENTOMOPATHOGENIC NEMATODES CAN INDUCE COMPONENTS OF SYSTEMIC RESISTANCE IN PLANTS
Jagdale, Ganpati B., S. Kamoun and P. S. Grewal
- 2:00 THE EFFECTS OF *STEINERNEMA CARPOCAPSAE* DENSITY AND SOIL MOISTURE ON MORTALITY OF THE LARGER BLACK FLOUR BEETLE, *CYNAEUS ANGUSTUS*
James, Jacob, C. Nansen, P. Porter, and **T. A. Wheeler**
- 2:15 MOLECULAR MECHANISM OF SYMBIOSIS BETWEEN ENTOMOPATHOGENIC NEMATODES AND BACTERIA
Ruisheng, An, and P. S. Grewal
- 2:30 NEMATODE ASSOCIATIONS WITH WILD BEES FROM GLOBAL DIVERSITY SURVEYS
Giblin-Davis, Robin M., N. Kanzaki, C. Hazir, S. Hazir, W. Wcislo, W. Ye and W. K. Thomas

SES Paper Session 2

Decomposition and Soil C and N Dynamics

1:00- 3:00

Williams

Convener: Stuart Grandy

- 1:00 MICROBIAL BIOMASS DYNAMICS ASSOCIATED WITH LITTER MASS DYNAMICS AND CHEMISTRY
Moorhead, Daryl, J. Herman and E. Hammer
- 1:15 THE RELATIONSHIP BETWEEN ENZYME ACTIVITY AND MICROBIAL BIOMASS DURING LITTER DECOMPOSITION
Rinkes, Zachary L. and M. N. Weintraub

- 1:30 SOIL EXTRACELLULAR ENZYME ACTIVITIES AS INDICES OF MICROBIAL NUTRIENT LIMITATION AND SOIL CNP DYNAMICS
Fatemi, Farrah R., I. J. Fernandez, K. S. Simon, and D. B. Dail
- 1:45 A COMMUNITY-LEVEL PHYSIOLOGICAL PROFILING APPROACH TO EVALUATING IN SITU SOIL CARBON SUBSTRATE UTILIZATION AND ITS INTERACTION WITH BIOAVAILABLE NITROGEN
Lehman, R. Michael, J. L. Garland, M. C. Zabaloy, C. L. Mackowiak, and S. D. Frey
- 2:00 THERE IS LITTLE VARIATION IN LIGNOCELLULOSIC FUNGAL COMMUNITY STRUCTURE ON DECOMPOSING WOOD OF TWO SPECIES *LIQUIDAMBAR STYRACIFLUA* AND *PINUS TAEDA* ACROSS 3 SITES IN OAK RIDGE, TN
Austin, Emily E.
- 2:15 IMPACTS OF LONG-TERM ORGANIC MATTER MANIPULATIONS ON NITROGEN CYCLING IN AN OLD GROWTH FOREST
Brewer, Elizabeth A. and D. D. Myrold
- 2:30 EARTHWORMS AND LITTER INPUTS DRIVE SOIL ORGANIC MATTER STABILIZATION, NUTRIENT DYNAMICS, AND PLANT NUTRIENT UPTAKE IN THE QUESUNGUAL AGROFORESTRY SYSTEM OF WESTERN HONDURAS
Fonte, Steven J. and J. Six
- 2:45 LEAF LITTER CHEMISTRY CHANGES DUE TO BURNING
Lammers, Kristin, J. Dighton, and G. Arbuckle-Keil

3:00 - 3:30

Afternoon Break

SES Symposium 2

Natural Disturbances and Soil Ecology: Organismal Disturbances

3:30 – 5:00

Sugar Maple

Convener: Mac Callaham and Sherri Morris

- 3:30 INTRODUCTION
- 3:35 INVASIVE PLANTS AND THEIR IMPACT ON MYCORRHIZAL SYMBIOSES
Klironomos, John N.

- 3:55 INVASIVE PLANT SPECIES AS AGENTS OF BELOWGROUND CHANGE
Hawkes, Christine V., N. T. Hausmann and S. N. Kivlin
- 4:15 SOIL MICROBES AND PLANT INVASIONS—HOW SOIL-BORNE
PATHOGENS REGULATE PLANT POPULATIONS AND AFFECT PLANT
INVASIONS
Reinhart, Kurt O.
- 4:35 LINKING THE ABOVEGROUND AND BELOWGROUND COMPONENTS
OF COMMUNITIES: 17-YEAR PERIODICAL CICADAS AS RESOURCE
PULSES IN NORTH AMERICAN FORESTS
Yang, Louie H.
- 4:55 GENERAL QUESTIONS AND CLOSING REMARKS

SES Workshop

Integrating Soil Observing and Sensor Networks in Soil Ecological Studies

3:30 – 5:00

Williams

Convener: Michael Allen

Participants: Allen, Michael F., N. Hasselquist, M. Taggart, K. Kitajima, R. Vargas, and
E. Mayzlish-Gati - Center for Biology, University of California, Riverside

SON Symposium 2

Nematode Management in a Rapidly Changing Climate and Economy

3:30 – 5:20

Silver Maple

Convener: Thomas Hewlett

- 3:30 RISING ATMOSPHERIC CO₂, CLIMATE CHANGE AND CARBON
BALANCE IN TERRESTRIAL ECOSYSTEMS
Drake, Bert
- 3:55 BIOLOGICAL NEMATODE CONTROL IN CHANGING CLIMATES.
Smith, Kelly S., and T. E. Hewlett,
- 4:20 DEVELOPING GREEN TECHNOLOGY FOR NEMATODE CONTROL
McCarter, James
- 4:45 AVICTA® BRAND NEMATICIDE FOR EARLY SEASON NEMATODE
MANAGEMENT IN UNITED STATES CROPPING SYSTEMS
Jones, Kurt, D. Long, K. Shetty, C. Watrin, L. Xing and B. Ulmer.

5:10 DISCUSSION - **Thomas Hewlett**

SON Paper Session 3

Resistance

3:30 – 5:00

Jost

Convener: Phil Roberts and Judy Theis

- 3:00 INFLUENCE OF PRECIPITATION ON POPULATIONS OF *HETERODERA GLYCINES* IN THE PRESENCE AND ABSENCE OF RESISTANT CULTIVARS
Bird, George W., **L. Schumacher**, J. Davenport, and T. Kendle
- 3:45 TRANSCRIPTIONAL PROFILING OF ROOT-KNOT NEMATODE INDUCED FEEDING SITES IN COWPEA (*VIGNA UNGUICULATA* L. WALP) USING A SOYBEAN GENOME ARRAY
Das, Sayan, J. D. Ehlers, T. J. Close, and **P. A. Roberts**
- 4:00 PROPOSAL FOR A STANDARD GREENHOUSE METHOD OF ASSESSING SOYBEAN CYST NEMATODE RESISTANCE IN SOYBEAN: SCE08 (STANDARDIZED CYST EVALUATION 2008)
Niblack, T. L., G. L. Tylka, P. Arelli, J. Bond, B. Diers, P. Donald, J. Faghihi, V. R. Ferris, K. Gallo, R. D. Heinz, H. Lopez-Nicora, R. Von Qualen, T. Welacky, and J. Wilcox
- 4:15 INHERITANCE OF RESISTANCE TO *MELOIDOGYNE INCOGNITA* IN PRIMITIVE COTTON ACCESSIONS
Starr, J. L., **R. L. Nichols**, E. Moresco, and C. W. Smith
- 4:30 QTL MAPPING OF ROOT-KNOT NEMATODE RESISTANCE IN COWPEA (*VIGNA UNGUICULATA*) USING EST-DERIVED SNP MARKERS
Muchero, Wellington, W. C. Matthews, N. N. Diop, P. R. Bhat, S. Wanamaker, J. D. Ehlers, T. J. Close, and **P. A. Roberts**
- 4:45 UTILITY OF GRAFTING FOR MANAGING SOUTHERN ROOT-KNOT NEMATODE, *MELOIDOGYNE INCOGNITA*, IN WATERMELON
Thies, Judy A., J. J. Ariss, R. L. Hassell, and S. Olson

SON/SES Poster Session 1

Wine & Cheese Poster Session

5:00 – 7:00

Livak Ballroom/Chittenden/Handy/Livak Fireplace Lounge

Posters will be displayed in numerical order but only authors of posters listed below will be present at their posters during this session to alleviate crowding around posters.

Carbon and Nitrogen Dynamics

- 1** INTERACTIONS BETWEEN THE LEGACIES OF PLANT LITTER INPUTS ON SOIL CHEMISTRY AND SOIL COMMUNITIES AFFECT LITTER AND SOIL ORGANIC MATTER DYNAMICS
Carrillo, Yolima, B.A. Ball, M. Strickland, M.A. Bradford
- 2** THE RELATIVE CONTRIBUTIONS OF SOIL BACTERIA AND FUNGI TO INORGANIC NITROGEN CYCLING IN SAGEBRUSH AND CHEATGRASS RHIZOSPHERE SOILS
DeCrappeo, Nicole M., P.J. Bottomley, D.D. Myrold, E.A. Brewer, E.J. DeLorenze, and D.A. Pyke
- 5** EFFECTS OF NITROGEN-BASED ENERGETIC MATERIALS ON LITTER DECOMPOSITION AND ENZYMATIC ACTIVITY IN A SANDY LOAM SOIL
Kuperman, Roman, S. Dodard, R. Checkai, C. Phillips, M. Simini, J. Hawari, S. Rocheleau, M. Joly, and G. Sunahara
- 6** SOIL ORGANIC MATTER RESPONSES TO CHRONIC NITROGEN ADDITIONS IN A TEMPERATE FOREST
Maclean, Rich, S. D. Frey, S. Ollinger, K. Nadelhoffer, M. Day, and J. LeMoine
- 7** CALCIUM INFLUENCES MICROBIAL C AND N MINERALIZATION IN NORTHERN HARDWOOD FOREST SOILS: A FIELD AND LABORATORY STUDY
Minick, Kevan J., M. C. Fisk, and P. M. Groffman
- 8** ESTIMATION OF CARBON POOLS BASED ON RESPIRATION FROM AGGREGATE SIZE FRACTIONS
Smith, Jeffrey L
- 11** THE EFFECTS OF CALCIUM AND NITROGEN AMENDMENTS ON SOIL ORGANIC MATTER DYNAMICS IN PINE FORESTS STANDS AT SAND RIDGE STATE FOREST
Taura, Joseph, J. A. Koch, E. A. Paul, K. D. McConnaughay, and S. J. Morris
- 12** MODELING URBAN SOIL CARBON STORAGE AND SEQUESTRATION POTENTIAL USING CENTURY, A PLANT-SOIL ECOSYSTEM MODEL
Trammell, Tara L.E., R.V. Pouyat, M.M. Carreiro, and I.D. Yesilonis

Impacts of Disturbance

- 15** EFFECTS OF LANDSLIDE DISTURBANCE ON GROUND LITTER ORIBATID MITE COMMUNITIES IN A TROPICAL MONSOON FOREST IN TAIWAN
Chien, Hao-Chiang, P. C. L. Hou, and N. Kanaeko
- 16** MIXED DISTURBANCE EFFECT ON SOIL NUTRIENTS AND PLANT SPECIES COMPOSITION
Gray, Dennis M. and J. Dighton
- 19** INFLUENCE OF LEAF SPECIES AND BELOW CANOPY WINDS ON LITTER INVERTEBRATES AND LITTER DECOMPOSITION RATES IN A TROPICAL MONSOON FOREST IN TAIWAN
Hou, Ping-Chun L., T.-Y. Chen, and K.-C. Lin
- 20** SOIL MICROBIAL COMMUNITY ALTERATIONS WITH DISTURBANCE IN SHORTGRASS STEPPE AND NORTHERN MIXED-GRASS PRAIRIE RANGELANDS
LaFantasie, Jordana , C. C. Gasch Salava, and S. F. Enloe
- 23** MINERAL NUTRIENT DYNAMICS OF TREMBLING ASPEN AND PAPER BIRCH UNDER ELEVATED CO₂ AND O₃
Parsons, William F.J., J. G. Bockheim and R. L. Lindroth

Restoration Ecology

- 24** SOIL RESPONSES FOLLOWING EXOTIC PLANT INVASION AND RESTORATION OF COASTAL SAGE SCRUB OF SOUTHERN CALIFORNIA
Dickens, Sara Jo M., E. B. Allen and L. S. Santiago
- 27** IMPACTS OF TALLGRASS PRAIRIE RESTORATION ON PLANT COMMUNITIES, SOIL BACTERIAL COMMUNITIES AND ECOSYSTEM FUNCTIONING
Murphy, Cheryl A. and B. L. Foster
- 28** DOES MYCORRHIZAL INOCULUM INCREASE FUNGAL COLONIZATION OF HYBRID WILLOW ROOTS (*SALIX VIMINALIS*)?
Ohowski, Brian M., A. Straathof, R. Schierholtz, J. N. Klironomos, K. E. Dunfield, C. Wagner-Riddle, and M. M. Hart
- 31** SOIL MICROBIAL COMMUNITIES AND SOIL CHEMICAL CONDITIONS IN A RECENTLY RESTORED SALT MARSH
Rajaniemi, Tara K. and J. Breton

- 32 BELOWGROUND MACROINVERTEBRATE RESPONSE TO GRASSLAND RESTORATION
Wodika, Ben R. and S. Baer

Biological Control

- 35 SCREENING OF MICRO-ORGANISMS ISOLATED FROM THE NORTHEAST OF CHINA FOR TOXICITY TO NEMATODES
Chen, Lijie, G. D. Zhang, B. Liu, J. S. Chen, J. R. Li, Y. Y. Wang, and Y. .X. Duan
- 36 BIOCONTROL EFFICACY OF THE ENDOPHYTIC *FUSARIUM MONILIFORME* ISOLATE Fe₁₄ TOWARDS THE RICE ROOT-KNOT NEMATODE *MELOIDOGYNE GRAMINICOLA* UNDER OXIC AND ANOXIC SOIL ENVIRONMENTS.
Le, Huong T. T., J. L. Padgham and **R. A. Sikora**
- 39 DIACETYLPHLOROGLUCINOL (DAPG); IS IT ACTIVE AGAINST NEMATODES?
Meyer, Susan L.F., J. M. Halbrendt, L. K. Carta, A. M. Skantar, T. Liu, H. M. E. Abdelnabby, and B. T. Vinyard
- 40 INFLUENCE OF POPULATION DENSITIES OF *DACTYLELLA OVIPARASITICA* AND *HETERODERA SCHACHTII* ON SUGARBEET CYST NEMATODE POPULATION SUPPRESSION.
Rocha, Fernando S., J. Smith Becker, S. Benecke, D. R. Jeske, J. Borneman, and **J. O. Becker**

Ecology and Behavior

- 43 PREDATOR NEMATODES DECLINE WITH LONG-TERM CO₂ ENRICHMENT
Antoninka, Anita, P. Reich, and N.C. Johnson
- 47 THE STRUCTURE OF BELOWGROUND NEMATODE COMMUNITIES UNDER *PANICUM VIRGATUM* (SWITCHGRASS) IS IMPACTED BY ABOVEGROUND PLANT DIVERSITY
Bliss, TJ, C. E. Brassil, and T. O. Powers
- 48 SOIL NEMATODE COMMUNITY RESPONSE TO LONG-TERM CROP ROTATION, ORGANIC MANAGEMENT AND PRAIRIE RESTORATION IN THE RED RIVER VALLEY OF CENTRAL NORTH AMERICA
Briar, Shabeg, M. Tenuta, C. Barker, and M. Entz
- 51 NEMATODE COMMUNITY ANALYSIS AS A POTENTIAL TOOL FOR DETECTING THE IMPACTS OF ORCHARD FLOOR MANAGEMENT

- Brutcher, Lisa J., J. Moore-Kucera, N. M. Wade, **R. E. Ingham**, and A. N. Azarenko
- 52** VERTICAL DISTRIBUTION OF SOIL FREE-LIVING NEMATODE COMMUNITY INHABITANTS IN A PLAYA AREA OF THE NORTHWESTERN NEGEV DESERT, ISRAEL
Cheng, Hu, S. Pen-Mouratov, and Y. Steinberger
- 55** HEAT TOLERANCE OF ANHYDROBIOTIC SEED GALL NEMATODES, *ANGUINA AGROSTIS*
Eisenback, J. D., C. W. Roane, J. R. Way, and N. Selz
- 56** EFFECTS OF SOIL TYPE, IRRIGATION AND *ROTYLENCHULUS RENIFORMIS* ON COTTON YIELD
Herring, Stephanie L. and S. R Koenning,
- 59** SPATIAL VARIATION OF NEMATODE COMMUNITIES IN A RELATIVELY HOMOGENEOUSLY FIELD AT THE SUB-ARCTIC COASTAL ENVIRONMENT AT CHURCHILL, MANITOBA, CANADA: A PRELIMINARY ANALYSIS
Lumactud, Rhea and M. Tenuta
- 60** ENDOPARASITIC NEMATODES AND ARBUSCULAR MYCORRHIZAL FUNGI RELATIONSHIP IN ROOTS OF SEVEN SOYBEAN CULTIVARS
Majic, Ivana, M. Ivezic, M. Brmez, E. Raspudic, M. Vratavic and A. Sudaric
- 63** RESIDUAL EFFECTS OF BENZYL ISOTHIOCYANATE ON HATCHING IN THE ROOT-KNOT NEMATODE, *MELOIDOGYNE INCOGNITA*
Masler, Edward P., I. A. Zasada, S. Sardanelli, S. T. Rogers, and J. M. Halbrendt
- 64** INCORPORATING SPATIAL DISTRIBUTION INTO THE NEMATODE FUNCTIONAL GUILD CONCEPT
Park, Sun-Jeong, R. A. J. Taylor, and P. S. Grewal
- 67** SPATIAL AND TEMPORAL DYNAMICS OF SOIL FREE-LIVING NEMATODE COMMUNITIES IN THE NIZZANA SAND DUNE ECOSYSTEM, NORTH-WESTERN NEGEV, ISRAEL
Pen-Mouratov, Stanislav, C. Hu, E. Hindin and Y. Steinberger
- 69** MEIOBENTHIC NEMATODE BIODIVERSITY IN THE CASPIAN SEA
Sharma, Jyotsna, T. J. Pereira, M. Mundo-Ocampo, and J. Baldwin
- 72** OCCURRENCE OF PLANT-PARASITIC NEMATODES ON GOLF COURSES IN ONTARIO AND QUÉBEC
Simard, Louis, G. Bélair, and J. Dionne

- 74 INCREASED SOIL MOISTURE AVAILABILITY RESULTING FROM SUBSURFACE ICE MELT HAS AN IMPACT ON NEMATODE ABUNDANCES AND COMMUNITY STRUCTURE IN A POLAR DESERT ECOSYSTEM
Smith, Tracy E., D. H. Wall, I. D. Hogg, and B. J. Adams
- 75 SOIL NEMATODE COMMUNITY STRUCTURE IN AN ALFALFA, CHILE AND COTTON CROP SEQUENCE
Trojan, Jacqueline M., S. H. Thomas, J. Schroeder, L. W. Murray, and N. Schmidt

Entomopathogenic Nematodes

- 76 ESTIMATING NUMBERS OF ENTOMOPATHOGENIC NEMATODES IN CITRUS ORCHARD SOIL SAMPLES USING REAL TIME QPCR
Campos-Herrera, Raquel, E. G. Johnson, F. E. El-Borai, J. H. Graham, and L. W. Duncan
- 79 MORPHOLOGY AND MOLECULAR PHYLOGENY OF TWO PANAMANIAN FIGWASP NEMATODES, *PARASITODIPLOGASTER CITRINEMA* AND *P. POPENEMA*
Kanzaki, Natsumi, **R. M. Giblin-Davis**, E. A. Herre, and B. J. Center
- 80 TERMITE-ASSOCIATED NEMATODES IN KENTING NATIONAL PARK, TAIWAN
Kanzaki, Natsumi, H.-F. Li, Y.-C. Lan, H. Kosaka, and **R.M. Giblin-Davis**
- 83 DEVELOPING REAL TIME qPCR ASSAY TO MEASURE THE PREDATION RATE OF ENDEMIC NEMATOPHAGOUS FUNGI ON ENTOMOPATHOGENIC NEMATODES
Pathak, Ekta, R. Campos-Herrera, E. G. Johnson, F. E. El-Borai, J. H. Graham, and L.W. Duncan
- 85 ENTOMOPATHOGENIC NEMATODES FROM CONTINENTAL PORTUGAL
Valadas, Vera, P. Vieira, S. Oliveira, and M. Mota

Resistance

- 86 THE TRANSCRIPTION FACTOR SKN-1 IS A POTENTIAL NEMATODE-SPECIFIC MULTIDRUG RESISTANCE TARGET
Choe, Keith P
- 89 BIOLOGICAL AND GENETIC CHARACTERISATION OF RESISTANCE TO ROOT LESION NEMATODE *PRATYLENCHUS* SPP. IN WHEAT

- Linsell, Katherine J.**, K. Davies, I. Riley, H. Wallwork, and K. Oldach
- 90** BERMUDAGRASS (*CYNODON SPP.*) AND SEASHORE PASPALUM (*PASPALUM VAGINATUM*) RESPONSES TO STING NEMATODES (*BELONOLAIMUS LONGICAUDATUS*)
Pang, Wenjing, W. T. Crow, and K. E. Kenworthy
- 93** RENIFORM NEMATODE (*ROTYLENCHULUS RENIFORMIS*) RESISTANCE LOCUS FROM *GOSSYPIUM ARIDUM* IDENTIFIED AND INTROGRESSED INTO UPLAND COTTON (*G. HIRSUTUM*)
Romano, Gabriela B., E. J. Sacks, **S. R. Stetina**, A. F. Robinson, D. D. Fang, O. A. Gutierrez, and J. A. Scheffler
- 94** RESPONSE OF CARICA PAPAYA TO *MELOIDOGYNE JAVANICA* IN THE GREENHOUSE
Sipes, Brent, M. Berry, R. Manshardt, and S. Ferreira

Tuesday, July 14, 2009

SON/SES Symposium 2

The Two Faces of Soil Community Ecology –
Interactions Within and Among Trophic Groups

8:00 – 9:35

Silver Maple

Convener: John Klironomos

- 8:00 INTRODUCTION
Klironomos, John
- 8:10 COMPARING THE CONTINENTAL-SCALE STRUCTURE OF SOIL
ARCHAEAL, BACTERIAL, AND FUNGAL COMMUNITIES
Fierer, Noah
- 8:35 PHYLOGENETIC SIGNAL IN FUNCTIONAL DIVERSITY AND
COMMUNITY ASSEMBLY OF ARBUSCULAR MYCORRHIZAL FUNGI
Parrent, Jeri L., H. Maherali, J. Powell, and J. N. Klironomos
- 8:55 POSITIVE AND NEGATIVE FEEDBACKS AFFECT ON COMMUNITY
STRUCTURE: A THEORETICAL APPROACH
Molofsky, Jane
- 9:15 TURNOVER OF BACTERIA BIOMASS IN SOILS BY PROTISTS
Adl, Sina

SON Student Paper Session

8:00 – 9:30

Sugar Maple

Conveners: An MacGuidwin and Patricia Timper

- 8:00 THE INTERACTION OF *VICIA FABA* BEANS WITH DIFFERENT POPULATIONS OF *DITYLENCHUS DIPSACI*
Stawniak, Natalia
- 8:15 INTERRELATIONSHIPS BETWEEN *HETERODERA SCHACHTII* AND *RHIZOCTONIA SOLANI* ON SUGAR-BEET: DISEASE DISCRIMINATION BY HYPERSPECTRAL DATA ANALYSIS
Hillnhütter, Christian, R. A. Sikora and E. C. Oerke
- 8:30 EVALUATION OF *COFFEA ARABICA L.* ACCESSIONS FROM ETHIOPIA FOR RESISTANCE TO THE KONA COFFEE ROOT-KNOT NEMATODE, *MELOIDOGYNE KONAENSIS*
Aoki, Sayaka, C. Nagai and B. Sipes
- 8:45 GENES ASSOCIATED WITH DESSICATION TOLERANCE IN THE FOLIAR NEMATODE *APHELENCHOIDES FRAGARIAE*
Fu, Zhen and P. Agudelo
- 9:00 EFFICACY OF NEMATICIDAL SEED TREATMENTS FOR CONTROL OF SOYBEAN CYST NEMATODE.
Frye, Jeffrey W
- 9:15 EFFECT OF CROP ROTATION ON *ROTYLENCHULUS RENIFORMIS* POPULATION STRUCTURE
Leach, Megan M., P. Agudelo and A. Lawton-Rauh

SON Paper Session 4

Management 1

8:00 – 9:30

Jost

Conveners: Michael McKenry and William Crow

- 8:00 HOST SUITABILITY OF SIXTEEN VEGETABLE CROP GENOTYPES FOR *MELOIDOGYNE INCOGNITA*
Anwar, S. A., M. V. McKenry, and A. U. Lughari
- 8:15 NEMATICIDE POTENTIAL OF METHIONINE ON TURFGRASSES
Crow, William T., J. P. Cuda, and B. R. Stevens

- 8:30 CONTROL OF *MELOIDOGYNE CHITWOODI* IN POTATO WITH REDUCED RATES OF 1,3-DICHLOROPROPENE, SUDANGRASS AND OXAMYL
Ingham, Russell E., N.L. David and N.M. Wade
- 8:45 PINE WILT DISEASE IN PORTUGAL: RECENT PROGRESS AND NEW APPROACHES TO THE UNDERSTANDING AND CONTROL OF THE PINWOOD NEMATODE AND ITS INSECT VECTOR
Mota, M., S. Oliveira, C. Vicente and P. Vieira
- 9:00 EFFICACY OF DMDS AND *BACILLUS FIRMUS* COMPARED TO OTHER COMMONLY USED NEMATOCIDES FOR CONTROL OF *MELOIDOGYNE CHITWOODI* IN POTATO
Hafez, S.L. and P. Sundararaj
- 9:15 EVALUATION OF MOVENTO™ (SPIROTETRAMAT) FOR EFFICACY AGAINST NEMATODES INFESTING PERENNIAL CROPS
McKenry, Michael, S. Kaku and T. Buzo

SES Paper Session 3

Soil Organisms in Grassland Systems

8:00 – 9:30

Williams

Convener: Sara Baer

- 8:00 SOIL MICROBIAL COMMUNITY RECOVERY IN TWO GRASSLAND RESTORATION CHRONOSEQUENCES ON CONTRASTING SOILS
Bach, Elizabeth M., C.K. Meyer, S.G. Baer, and J. Six
- 8:15 THE ROLE OF POPULATION SOURCE AND GRASS DOMINANCE ON RECOVERY OF ECOSYSTEM STRUCTURE AND FUNCTION IN TALLGRASS PRAIRIE RESTORATIONS
Klopf, Ryan P. and S.G. Baer.
- 8:30 THE DISTRIBUTION OF SOIL INSECTS OVER DIFFERENT SPATIAL SCALES IN GRASSLAND
Benefer, Carly, R. Blackshaw, M. Knight, and J. Ellis
- 8:45 PREDICTING THE SIZE OF LEATHERJACKET (*TIPULA PALUDOSA* MEIG.) POPULATIONS IN GRASSLAND
Blackshaw, Rod P.
- 9:00 INTRA-GENERATIONAL MORTALITY OF LEATHERJACKETS (*TIPULA PALUDOSA*)
Blackshaw, Rod P.

9:30-10:00

Morning Break

SON/SES Symposium 2-continued

The Two Faces of Soil Community Ecology –
Interactions Within and Among Trophic Groups

10:00 – 11:30

Silver Maple

Convener: John Klironomos

10:00 APPARENT COMPLEXITY AND THE STABILITY OF REAL AND MODEL ECOSYSTEMS

Moore, John C.

10:25 TROPHIC PHYLOGEOGRAPHY: A RESEARCH PROGRAM FOR IDENTIFYING DRIVERS OF SOIL FOOD WEB COMPOSITION AND CONCERTED PATTERNS OF CHANGE OVER TIME AND SPACE

Adams, Byron J., Wall, D. H.

10:45 SOIL BIOTA INTERACTIONS AND SOIL AGGREGATION

Rillig, Matthias C., and D.L. Mummey

11:05 ARE LONG-TERM CHANGES IN SOIL ORGANIC MATTER REFLECTED IN THE SOIL COMMUNITIES?

Murray, Phillip J., P.R. Hirsch, L.M. Gilliam, S.P. Sohi, J.K. Williams, I.M. Clark, and P.C. Brookes

11:25 GENERAL QUESTIONS AND CLOSING REMARKS

SON Student Paper Session-continued

10:00 – 11:30

Sugar Maple

Conveners: An MacGuidwin and Patricia Timper

10:00 EFFECT OF BIOCIDES AND SOIL DISTURBANCE ON NEMATODE COMMUNITY AND EXTRACELLULAR ENZYME ACTIVITY IN SOYBEAN CYST NEMATODE SUPPRESSIVE SOIL

Bao, Yong, D.A. Neher and S. Chen

10:15 *ROTYLENCHULUS RENIFORMIS* DISPERSAL PATTERNS UPON INTRODUCTION INTO A COTTON FIELD

- Moore, Scott R.**, K. S. Lawrence, F. J. Arriaga, E. van Santen, and C. H. Burmester
- 10:30 SOIL NEMATODE COMMUNITIES AS INDICATORS OF THE INTER-DEPENDENCY OF ABOVEGROUND AND BELOWGROUND BIOTA IN SUB-ARCTIC TERRESTRIAL SYSTEMS: PRELIMINARY RESULTS
Lumactud, Rhea and M. Tenuta
- 10:45 IDENTIFICATION AND MAPPING OF GENETIC TRAITS INVOLVED IN PLANT PARASITISM IN *MELOIDOGYNE HAPLA*
Thomas, Varghese P. and V. M. Williamson
- 11:00 FATTY ACID FINGERPRINTS USED FOR THE IDENTIFICATION OF PLANT-PARASITIC NEMATODES
Sekora, Nicholas S., K. S. Lawrence, E. van Santen, P. Agudelo and J. A. McInroy
- 11:15 MOLECULAR FINGERPRINTING TO MONITOR NEMATODE POPULATIONS IN AGRONOMIC SOILS
Conner, Kassie N. and R. N. Huettel

SON Paper Session 5

Ecology and Behavior

10:00 – 11:30

Williams

Conveners: Koon-Hui Wang and Dorota Porazinska

- 10:00 LINKING OPERATIONAL CLUSTERED TAXONOMICAL UNITS TO NEMATODE SPECIES IN PARALLEL-TAGGED ULTRASEQUENCING
Porazinska, Dorota L., R. M. Giblin-Davis, T. O. Powers, W. Sung, and W. K. Thomas.
- 10:15 DEAD ROOTS ARE A HABITAT OF *PRATYLENCHUS PENETRANS*
MacGuidwin, A. E
- 10:30 HOW DO TALL FESCUE LAWNS ESTABLISHED ON COMMON URBAN SOIL MATRICES INFLUENCE THE NEMATODE FOOD WEB AND NUTRIENT POOLS?
Cheng, Zhiqiang and P. S. Grewal
- 10:45 NEMATODE COMMUNITY STRUCTURE OF SOIL FROM ALTERNATIVE MANAGEMENT AND NATURAL ECOSYSTEMS
Quintanilla, Marisol, and **G. Bird**

- 11:00 RESPONSE OF A NEMATODE COMMUNITY TO TILLAGE AND NEMATOCIDE APPLICATION IN COTTON
Timper, Patricia, R. F. Davis, and G. B. Jagdale
- 11:15 CAN NEMATODE COMMUNITY INDICES ELUCIDATE PLANT HEALTH CONDITIONS?
Wang, Koon-Hui, R. McSorley, and R. N. Gallaher

SES Paper Session 4

Spatial Characteristics of Soil Chemistry and Biology

10:00 – 11:30

Jost

Convener: Jeff Smith

- 10:00 SPATIAL VARIATION IN SOIL BIOTA AND ORGANIC MATTER IN THE MCMURDO DRY VALLEYS, ANTARCTICA
Barrett, J.E., D.W. Hopkins, I. Hogg and S.C. Cary
- 10:15 SPATIAL ANALYSIS OF MICROBIAL COMMUNITY COMPOSITION IN A CONIFEROUS FOREST AND ADJACENT CLEARCUT SITES: EVIDENCE FOR DISPARATE ENVIRONMENTAL CONTROLS
Mummey, Daniel L. and P. W. Ramsey
- 10:30 SOIL PROPERTIES, UNDERSTORY VEGETATION AND MICROBIAL COMMUNITY STRUCTURE AND STABILITY IN PURE AND MIXED-WOOD STANDS OF TREMBLING ASPEN AND JACK PINE FROM SOUTHERN BOREAL FOREST IN NORTHWESTERN QUEBEC
Royer-Tardif, Samuel and R. L. Bradley
- 10:45 MICROORGANISMS AND ECOSYSTEM DEVELOPMENT: DO SOIL MICROBIAL COMMUNITIES SHOW PATTERNS OF SUCCESSION?
Williams, Mark A., S. Tarlera, K. Jangid, and W.B. Whitman
- 11:00 SOIL CARBON STORAGE ACROSS A GRADIENT OF LAND USE IN MOUNTAIN ECOSYSTEMS
Chapman, Samantha K., R. Shaw, and J.A. Langley
- 11:15 DO SOIL NEMATODE COMMUNITY REFLECT ALTERED URBAN SOIL CHEMICAL PROPERTIES?
Park, Sun-Jeong, Z. Cheng, H. Yang, E. E. Morris, M. Sutherland, B. B. McSpadden Gardener, and P. S. Grewal

11:30-1:00

Lunch

SES Board Meeting - Boulder Society

SON Committee Meetings - Mountain Mansfield

JON Editorial Board Meeting - Spruce

SON Student Paper Session-continued

1:00 – 1:45

Sugar Maple

Conveners: An MacGuidwin and Patricia Timper

- 1:00 EFFECTS OF IRRIGATION, THATCH, AND A WETTING AGENT ON
'CANDIDATUS PASTEURIA USGAE' ENDOSPORE PLACEMENT IN TURF
Luc, John E., W. T. Crow, R. McSorley, J. B. Sartain, and R. M. Giblin-Davis
- 1:15 LATERAL DISPERSAL OF THE ENTOMOPATHOGENIC NEMATODE
HETERORHABDITIS BACTERIOPHORA FROM INFECTED HOST
CADAVERS IN SOIL
Bal, Harit K., R. Robin, A. J. Taylor, and P. S. Grewal
- 1:30 SUSCEPTIBILITY OF THE ADULT JAPANESE BEETLE TO
ENTOMOPATHOGENIC NEMATODES
Morris, Elizabeth Erin and P. S. Grewal

SES Paper Session 5

Plant-Microbe Interactions

1:00 – 3:00

Silver Maple

Convener: Elizabeth Brewer

- 1:00 POPULATION-LEVEL GENETIC DIFFERENTIATION IN POPULUS AND
EUCALYPTUS IMPACT SOIL NUTRIENT AVAILABILITY
Schweitzer, Jennifer A., J. K. Bailey, R. Barbour, J. A. O'Reilly-Wapstra, T. G.
Whitham and B. M. Potts
- 1:15 THE INFLUENCE OF PLANT GENOTYPE AND ENVIRONMENT ON
NITROGEN CYCLING IN A MODEL POPULUS SYSTEM
Pregitzer, Clara
- 1:30 EFFECTIVENESS OF GREEN TREE RETENTION AND TREE REGROWTH
IN MAINTAINING THE DIVERSITY OF ECTOMYCORRHIZAL FUNGI IN
HARVESTED AREAS OF COASTAL FOREST IN BRITISH COLUMBIA
Trofymow, J. A. and R. A. Outerbridge,

- 1:45 ARBUSCULAR MYCORRHIZAL FUNGI FROM DIFFERENT
SUCCESSIONAL STAGES DO NOT CHANGE PLANT PERFORMANCE
Sikes, Benjamin A. and J. N. Klironomos
- 2:00 CORRELATIONS BETWEEN ABOVE-GROUND & BELOW-GROUND
DIVERSITY RESPONSE TO MANAGEMENT
Adl, Sina, A. Mills, A. Maharning, M. Murray, and J. Murphy
- 2:15 USING PYROSEQUENCING TO COMPARE THE PHYLOGENETIC AND
FUNCTIONAL ATTRIBUTES OF SOIL BACTERIAL COMMUNITIES
Lauber, C. L. and N. Fierer
- 2:30 FUNCTIONAL VARIABILITY WITHIN THE PHYLUM
GLOMEROMYCOTA
Koch, Alexander M., P. M. Antunes, H. Maherali, and J. N. Klironomos
- 2:45 ECOSYSTEM CONSEQUENCES OF TOP-DOWN EXTINCTION IN A
DETRITAL MICROECOSYSTEM
Lindo, Zoë, A. Gonzalez, P. Staddon, F. Gilbert and P. Crittenden

SON/SES Poster Session 2

2:00 – 4:00

Livak Ballroom/Chittenden/Handy

*Posters will be displayed in numerical order but only authors of
posters listed below will be present at their posters during this
session to alleviate crowding around posters.*

Genetics

- 3** INTRON GAIN AND LOSS IN CAENORHABDITIS
Giese, Gabrielle E., M. Srivatsavai, Z. Hadadian, P. J. Hatcher, R. D. Bergeron,
W. K. Thomas, and J. J. Collins

Host Parasite Interactions

- 4** THE EFFECT OF EARLY SOYBEAN CYST NEMATODE INFECTION ON
SOYBEAN GROWTH AND PHYSIOLOGY
Cirrinicione, Peter, P. M. Tefft, and C. J. Springer
- 9** PATHOGENICITY OF *MELOIDOGYNE JAVANICA* RACE 3 TO PEANUT AND
SOME OTHER CROPS COMPARED TO *M. ARENARIA* RACE 1 AND *M.*
JAVANICA RACE 1
Mendes, Maria de Lourdes, J. I. Orjay, and D. W. Dickson

- 10 HISTOLOGICAL CHANGES INDUCED BY *BURSAPHELENCHUS XYLOPHILUS* IN SEEDLING TISSUES OF *PINUS PINASTER*
Mota, Luísa, P. Barbosa, M. Mota, and L. Ascensão
- 13 SEPARATE AND CONCOMITANT EFFECTS OF *MELOIDOGYNE PARTITYLA* AND *MESOCRICONEMA XENOPLAX* ON PECAN
Nyczepir, A. P. and B. W. Wood
- 14 INTERACTIONS AMONG *MELOIDOGYNE INCOGNITA*, ANNUAL WEEDS, AND *VERTICILLIUM DAHLIAE*: IMPLICATIONS FOR ENHANCEMENT OF PATHOGEN AND WEED POPULATIONS IN CHILE PEPPER PRODUCTION.
Thomas, Stephen. H., J. M. Trojan, J. Schroeder, C. Fiore, S. Sanogo, L. Leiss, and L. W. Murray
- 17 ESTIMATING VIRULENCE OF SOYBEAN CYST NEMATODE FIELD POPULATIONS IN RESPONSE TO USE OF RESISTANT CULTIVARS
Zheng, Jingwu and **S. Y. Chen**

Management

- 18 GREEN MANURE AND BIOFUMIGATION FOR ROOT LESION NEMATODE AND VERTICILLIUM WILT MANAGEMENT IN STRAWBERRY PRODUCTION
Bélaire, Guy and J. Coulombe
- 21 NEMATODE CONTROL WITH OXAMYL FOLIAR SPRAYS: EFFECT OF SPRAY CONCENTRATION, VOLUME AND SOIL AND PLANT COVER
Desaeger, Johan and M. Rivera
- 22 GEOGRAPHIC DIFFERENCES IN FIELD POPULATIONS OF SOYBEAN CYST NEMATODE (SCN)
Faghihi, Jamal, P. Donald, T. Welacky, G. Noel, and V. Ferris
- 25 EFFECTIVENESS OF SOIL SOLARIZATION ON MANAGEMENT OF *PHYTOPHTHORA RUBI* AND *PRATYLENCHUS PENETRANS* IN NORTHWESTERN WASHINGTON
Gigot, Jessica, I. Zasada and T. Walters
- 26 EVALUATION OF TRAP CROPS FOR *HETERODERA SCHACHTII* MANAGEMENT IN SUGAR BEET PRODUCTION
Hafez, S.L. and P. Sundararaj
- 29 SEED TREATMENT – AN EFFICIENT STRATEGY FOR *HETERODERA SCHACHTII* MANAGEMENT IN SUGAR BEET
Hafez, S.L. and **P. Sundararaj**

- 30 IMPROVING COTTON MANAGEMENT SYSTEMS IN RENIFORM NEMATODE FIELDS USING HERBICIDES TO PROMOTE WEED CONTROL AND REDUCE COTTON RE-GROWTH
Herring, Dustin M., K. S. Lawrence, S. R. Moore, and C. H. Burmester
- 33 EVALUATION OF SPK, A NOVEL COMBINATION OF ORGANIC COMPOUNDS FOR ROOT-KNOT NEMATODE CONTROL IN TOMATO
Kokalis-Burelle, Nancy, E. N. Roskopf, and F. Iriarte
- 34 *BRASSICA GLUCOSINOLATE* PROFILES ASSOCIATED WITH BIOFUMIGANT ACTIVITY AGAINST *MELOIDOGYNE HAPLA*
LaMondia, James A. and N. A. McHale
- 37 DISTRIBUTION AND DENSITIES OF PLANT-PARASITIC NEMATODES ON *ZEA MAYS* IN NORTHERN ILLINOIS
Lopez-Nicora, H., J. Morrison, D. Feltes, and Niblack, T. L
- 38 EFFECTS OF A STRIP-TILL COVER CROPPING SYSTEM ON NEMATODE COMMUNITIES
Marahatta, Sharadchandra P., K. H. Wang, and B. S. Sipes
- 41 INTERACTION OF BRASSICACEOUS SEED MEAL AND ROOTSTOCK ON RECOVERY OF *PRATYLENCHUS PENETRANS* FROM ROOTS OF APPLE GROWN IN REPLANT ORCHARD SOILS
Mazzola, Mark, J. Brown and G. Fazio
- 42 EFFICACY OF BIO-FUMIGATION AND SOIL SOLARIZATION FOR THE MANAGMENT OF DAGGER NEMATODES IN FRUITS
Pokharel, Ramesh R and H. J. Larsen, S. Palanisamy
- 45 ROOT-KNOT NEMATODE PROBLEMS IN VEGETABLE AND FRUIT CROPS IN EASTERN CHINA: PATHOGENS AND MANAGEMENT
Zhao, L., K. Guo, Y. Zhang, X. Li, H. Shi, and **J. Zheng**

Taxonomy and Systematics

- 46 FIRST REPORT OF *M. PARTITYLA* INFECTING LAUREL OAK (*QUERCUS LAURIFOLIA*)
Brito, Janete A., J. D. Stanley, R. N. Inserra, M. Hao, and D. W. Dickson
- 49 CULTURE AND MORPHOLOGY OF A NEW PARASITORHABDITIS (*RHABDITIDA*) FROM *DENDROCTONUS FRONTALIS* DEMONSTRATED WITH ALTERNATIVE METHODS FOR LOW TEMPERATURE-SEM
Carta, L.K., G. Bauchan, C.-Y. Hsu and C. Yuceer
- 50 TAXONOMIC IDENTIFICATION AND MOLECULAR CHARACTERIZATION OF

NEMATODES IN THE SUBORDER CRICONEMATINA

Cordero, M., R. T. Robbins, and A. L. Szalanski

- 53** ON THE DESCRIPTION OF TWO NEW SPECIES OF *PAURODONTTELLA* (NEMATODA: PAURODONTINAE) WITH A KEY AND DIAGNOSTIC COMPENDIUM TO THE SPECIES OF THE GENUS
Handoo, Zafar A., I. E. Yawar, N. Kazi, and S. Fayyaz
- 54** MOLECULAR AND MORPHOLOGICAL DESCRIPTION OF *MELOIDOGYNE ARENARIA* FROM TRAVELER'S TREE (*RAVENALA MADAGASCARIENSIS*)
Skantar, Andrea M., L. K. Carta, and Z. A. Handoo
- 57** OCTUPUS: A PACKAGE FOR DEFINING "OPERATIONAL CLUSTERED TAXONOMIC UNITS FROM PARALLEL-TAGGED ULTRA-SEQUENCING"
Sung, Way, D. Porazinska, S. Creer, R. M. Giblin-Davis, and **W. K. Thomas**

Nematode Ecology

- 58** DETECTING MICROBIAL NUCLEIC ACIDS WITHIN NEMATODE BODIES: A PHOTO ESSAY
O'Leary, Cecilia A., A. M. Treonis, C. Marks, and I. A. Zasada
- 61** GRANITE ROCK OUTCROPS: AN EXTREME ENVIRONMENT FOR SOIL NEMATODES?
Parsons, Charles H.H., E. Austin, K. Semmens, and A.M. Treonis
- 62** ISOLATION AND CULTURE OF THE ANTARCTIC NEMATODE, *PLECTUS MURRAYI* UNDER LABORATORY CONDITIONS
Tomasel, Cecilia M. de, G. Li, B. J. Adams, B. Adhikari and D. H. Wall
- 65** NEMATODE COMMUNITY ASSOCIATED WITH A NEW BI-PHASIC BIORETENTION RAIN GARDEN ECOSYSTEM
Yang, Hanbae, S. J. Park, E. L. McCoy, W. A. Dick, and P. S. Grewal

Earthworm Ecology

- 66** INSECTICIDE EFFECTS ON EARTHWORMS: LABORATORY AND FIELD STUDIES
Benslim, Hicham, J. K. Whalen, and A. Vanasse
- 68** INVASIVE EARTHWORM RESPONSES TO EXPERIMENTAL REMOVAL OF THE INVASIVE SHRUB *LIGUSTRUM SINENSE* (CHINESE PRIVET) IN RIPARIAN FORESTS OF THE SOUTHERN PIEDMONT
Callaham, Jr., Mac A., G. A. Langhenry, J. L. Hanula, and S. Horn

- 70 THE INVASIVE EARTHWORM *PONTOSCOLEX CORETHRURUS* INCREASES CO₂ EFFLUX AND NITROGEN MINERALIZATION IN THREE TYPES OF FOREST SOILS.
Chen, Ting-Wen, C.-P. Wang, and P.-C.L. Hou
- 71 EFFECTS OF EXOTIC EARTHWORMS ON SOIL MICROBIAL COMMUNITY COMPOSITION IN A NORTHERN HARDWOOD FOREST
Dempsey, Mark A., M. C. Fisk, J. B. Yavitt, T. J. Fahey, P. M. Goffman, J. C. Maerz
- 73 BACTERIAL AND FUNGAL CONTRIBUTIONS TO NITROUS OXIDE PRODUCTION AS INFLUENCED BY THE EARTHWORM *LUMBRICUS TERRESTRIS*
Durocher, Simon, and J.K. Whalen
- 77 VARIATION IN EARTHWORM DENSITY ACROSS URBANIZED LAND COVERS AND EFFECTS ON SOIL CHEMISTRY
Mancarella, Taryn, L. Byrne, and S. O'Shea

Diversity in Soil Systems

- 78 THE EFFECTS OF PLANT COMMUNITY COMPOSITION AND RICHNESS ON METHANE PRODUCTION AND IRON REDUCTION IN EXPERIMENTAL MESOCOSMS
Andrews, Sarah, R. Schultz, S.D. Frey, and V. Bouchard
- 81 ECOSYSTEM PRODUCTIVITY AND SOIL FOOD WEB STRUCTURE – PAIRED FOREST AND GRASSLAND TRANSECTS ACROSS OREGON
Colby, Samantha E., and A. R. Moldenke
- 82 ARBUSCULAR MYCORRHIZAL FUNGI DIVERSITY IN NATIVE TALLGRASS PRAIRIE AND AGRICULTURAL CROPLAND
Damm, Mary C., K. M. Lankford, and J. D. Bever
- 84 THE COMPOSITION AND FUNCTIONS OF BIOLOGICAL SOIL CRUSTS IN THE NORTHEASTERN U.S.
Finn, E. S. and R. K. Thiet
- 87 PLANT AND SOIL MICROBIAL COMMUNITY STRUCTURE ASSOCIATED WITH NATIVE AND EXOTIC ANNUAL BROME DOMINATED RANGELAND IN WYOMING
Gasch Salava, Caley, S. Enloe, and P. Stahl
- 88 ARBUSCULAR MYCORRHIZAL FUNGI PRE-INOCULANT IDENTITY DETERMINES COMMUNITY COMPOSITION IN ROOTS
Mummey, Daniel L. and M. C. Rillig

- 91** THE DIVERSITY OF TARDIGRADES AND THEIR ROLE IN THE SOIL FOOD WEBS IN THE MCMURCO DRY VALLEYS, ANTARCTICA
Nielsen, Uffe N., D. H. Wall, and B. J. Adams
- 92** SOIL MICROBIAL COMMUNITY – PLANT COVER RELATIONSHIP IN A DESERT ECOSYSTEM
Vered, Saul-Tcherkas and Y. Steinberger
- 95** EFFECT OF RIPARIAN HEDGROWS ON BENEFICIAL ORGANISMS AND ECONOMIC PESTS IN ONTARIO
Welacky, T. W., C. Fox, T. Anderson, D. Hunt, and R. Michelutti

Soil Ecology Education

- 96** THE EARTH BENEATH OUR FEET: SOIL ECOLOGY GRADUATE STUDENTS TACKLE THE MYSTERY SOIL LAB
Thiet, Rachel K., B.M. Dempsey, N. Gertz-Young, L. Schottenfeld, J. Skinner, V. Snowdon, and M. F. Vinson

3:00 - 3:30

Afternoon Break

4:00 - 6:00

Poster Take Down

4:00 - 5:30

SON Business Meeting - Silver Maple

4:00 - 5:30

SES Business Meeting - Sugar Maple

4:00 – 5:30

Scenic Narrated Cruise on Spirit of Ethan Allen
(self-ticketed) - Lakefront

6:00 - 7:00

SON/SES Social - Burlington Waterfront

7:00 – 9:00

SON Banquet - Burlington Waterfront

7:00 – 9:00

SES Banquet - Burlington Waterfront

Wednesday, July 15, 2009

8:00 – 12:00

SON Executive Board Meeting - Boulder Society

SON/SES Student Organized Symposium

Faces of the Future

8:00 – 9:30

Jost

Organizers: Melissa Yoder and Elizabeth Brewer

Convener: Nicole DeCrappeo

- 8:00 PLANT COMPOSITIONAL SHIFTS MODERATE CLIMATE CHANGE EFFECTS ON SOIL ENZYME ACTIVITIES AND SOIL NEMATODES.
Kardol, Paul, M. A. Cregger, C. E. Company, A. T. Classen
- 8:15 PLANT-PARASITIC NEMATODES ASSOCIATED WITH ASSOCIATED WITH PLANTS (*MISCANTHUS SPP. AND PANICUM VIRGATUM*) USED FOR BIOFUELS
Mekete, Tesfamariam and T. Niblack
- 8:30 EFFECT OF LONG-TERM FERTILIZATION ON SOIL NEMATODE COMMUNITIES UNDER GREENHOUSE CONDITION
Li, Q., W.J. Liang, Y.L. Lou, and J.N. Zhang
- 8:45 POST-FUMIGATION POPULATION DYNAMICS OF *MELOIDOGYNE* AND *PASTEURIA PENETRANS* IN A PEANUT FIELD
Orajay, Joey I., G. K. Kariuki, M. L. Mendes, W. T. Crow, and D. W. Dickson
- 9:00 THREE-DIMENSIONAL RECONSTRUCTION OF THE ANTERIOR, NON-AMPHID SENSORY ANATOMY IN *APHELENCHUS AVENAE* (TYLENCHOMORPHA) WITH PHYLOGENETIC COMPARISON TO RHABDITIDA OUTGROUPS
Ragsdale, Erik J., P. Ngo, J. Crum, M. H. Ellisman, and J. G. Baldwin

SON Paper Session 6

Management 2

8:00 – 9:30

Silver Maple

Convener: Saad Hafez and Antoon Ploeg

- 8:00 EFFECT OF SIMULTANEOUS DROUGHT STRESS AND ROOT-KNOT NEMATODE INFECTION ON COTTON YIELD AND FIBER QUALITY

- Davis, R. F.**, H. J. Earl and P. Timper
- 8:15 PROTECTION STRATEGIES FOR “SAFE COCOA BEANS HARVEST” IN NEMATODE-INFESTED PRODUCTION ENVIRONMENTS
Fademi, Olutayo Akanbi. G. O. Iremiren, S. B. Orisajo, M. O. Okeniyi, and M. O. Ogunlade.
- 8:30 REPRODUCTION OF THREE MELOIDOGYNE SPECIES ON CRUCIFEROUS BIOFUMIGANT CROPS
Ploeg, Antoon
- 8:45 DIRECT DETECTION OF PLANT-PARASITIC NEMATODES FROM SOIL USING REAL-TIME PCR
Toyota, Koki, E. Sato, Y.Y. Min, and K. Goto
- 9:00 EVALUATION OF GREEN MNAURE CROPS FOR BIOFUMIGATION POTENTIAL TO CONTROL *M.CHITWOODI* UNDER GREEN HOUSE CONDITIONS
Hafez, S.L., **P. Sundararaj** and R. Porteneir

SES Symposium 3

Urban Ecology

8:00 – 9:30

Sugar Maple

Conveners: Loren Byrne and Mitchell Pavao-Zuckerman

- 8:00 ECOSYSTEM SERVICES IN URBAN SOILS: WHAT DO THEY DO AND WHAT DO WE WANT THEM TO DO?
Byrne, Loren B.
- 8:15 URBAN SOIL FAUNA AND ECOSYSTEM SERVICES: EXAMPLES FROM THE BALTIMORE ECOSYSTEM STUDY
Szlavec, Katalin, R.V. Pouyat, W. Carroll, S. M. Lev, P.M. Groffman, R. Casey and E. R. Landa
- 8:30 FROM THE GROUND UP: CONSERVING SOILS AND ECOSYSTEM SERVICES IN URBAN WOODLAND PARKS
Carreiro, Margaret and E. Levine
- 8:45 CARBON SEQUESTRATION, NUTRIENT POOLS, AND SOIL FOOD WEBS IN URBAN SOILS
Grewal, Parwinder
- 9:00 ECOSYSTEM SERVICES PROVIDED BY TURFGRASS AND LANDSCAPE PLANTINGS

Amador, Jose A.

- 9:15 URBAN GREENSCAPE, SOILS, AND ECOSYSTEM FUNCTIONING IN A SEMI-ARID URBAN ECOSYSTEM
Pavao-Zuckerman, Mitchell A.

SES Paper Session 6

Investigating Microbial Community Interactions

8:00 – 9:30

Williams

Conveners: Dustin Herrmann and Joseph Taura

- 8:00 INVESTIGATING SOIL FOOD WEBS – TRACKING THE TRANSLOCATION OF ^{13}C AND ^{15}N THROUGH MICROBIAL INTERACTIONS WITHIN THE SOIL
Crotty, Felicity V., S. M. Adl, C. D. Clegg, R. P. Blackshaw, and P. J. Murray
- 8:15 MOLECULAR DIALOGUES AND DEFENSE MECHANISMS IN BACTERIA-PROTOZOA INTERACTIONS
Mazzola, Mark, I. de Bruijn and J. M. Raaijmakers
- 8:30 A DNA-BASED SYSTEM FOR DEFINING SPECIES BOUNDARIES IN MICROBIAL COMMUNITIES
Powell, Jeff R., M. T. Monaghan, M. Öpik, and M. C. Rillig
- 8:45 A PROPOSED APPROACH FOR THE ASSESSMENT OF SOIL CONTAMINANTS ON INDIGENOUS BOREAL FOREST SOIL MICROORGANISMS
Rahn, Jessica H., L.A. Beaudette, J.T. Trevors, H. Lee, R. Theal, P. Gillespie, and R. Scroggins.
- 9:00 DEVELOPMENT OF AFLP-DERIVED STRAIN-SPECIFIC DNA MARKERS AND PERSISTENCE ASSESSMENT OF 10 DOMESTIC SUBSTANCE LIST MICROORGANISMS IN SOIL MICROCOSMS
Xiang, Shu-Rong, M. Cook, S. Saucier, P. Gillespie, R. Socha, R. Scroggins, and L.A. Beaudette.
- 9:15 SOIL TOXICITY TESTS FOR ASSESSING CANADIAN BOREAL FOREST SOILS USING ECOLOGICALLY-RELEVANT PLANT AND SOIL INVERTEBRATE SPECIES
Princz, Juliska I., M. Moody, L. Van der Vliet and R. Scroggins

9:30-10:00

Morning Break

SON Symposium 3

Bionematicides

10:00 – 12:00

Silver Maple

Convener: Pam Morrone

- 10:00 INTRODUCTION
Marrone, Pam
- 10:05 STRATEGIES FOR USING PASTEURIA TO CONTROL PLANT PARASITIC NEMATODES
Hewlett, Thomas E., J. P. Waters and L. J. Simmons
- 10:25 COMMERCIAL INTRODUCTION OF BIONEMATICIDES BASED ON *PAECILOMYCES LILACINUS*
Dimock, Michael B
- 10:45 MUSTARD BIOFUMIGATION DISRUPTS BIOLOGICAL CONTROL BY *STEINERNEMA* SPP. NEMATODES IN THE SOIL
Henderson, Donna R., E. Riga, R.A. Ramirez, J. Wilson, and W.E. Snyder
- 11:05 DISCOVERY AND DEVELOPMENT OF MICROBIAL AND PLANT NATURAL PRODUCTS FOR CONTROL OF PLANT PARASITIC NEMATODES
Marrone, P.G. and M.E. Koivunen
- 11:25 BIOFUMIGATION FROM BRASSICAS AND FUNGI AGAINST NEMATODES
Riga, Ekaterini, Lacey, L., Guerra, N., and H. P. Collins- to be moved

SON Workshop

Challenges of Extension Nematology in North America and Europe

10:00 – 12:00

Jost

Convener: Ekaterini Riga and Andreas Westphal

- 10:00 EXTENSION SUPPORT FOR GERMAN FARMERS: HOW DOES IT WORK?
Westphal, Andreas
- 10:20 NEMATODE EXTENSION ACTIVITIES IN PRAIRIE CANADA: TO BOLDLY GO WHERE NO ONE HAS GONE BEFORE
Tenuta, Mario
- 10:40 NEMATOLOGY OUTREACH IN CALIFORNIA
Becker, J. Ole, and J.A. Smith Becker

11:00 TRAIN-THE-TRAINER WORKSHOPS AS A PLATFORM FOR EXTENDING NEMATOLOGICAL OUTREACH IN THE NORTHEAST REGION OF THE U.S.

Abawi, George S., B. K. Gugino, J. A. LaMondia, and D. A. Neher

11:20 EXTENSION NEMATOLOGY CHALLENGES IN THE DIVERSE AGRICULTURAL ENVIRONMENT

Riga, Ekaterini

SES Symposium 4

An Holistic View of Soil Ecology: A Tribute to the Late John Lussenhop

10:00 – 11:30

Sugar Maple

Convener: John Dighton

10:00 EFFECTS OF LEAF LITTERS ON THE ECTOMYCORRHIZAL FUNGAL COMMUNITY AND SOIL FAUNA IN PITCH PINE MESOCOSMS

Dighton, John, L. Jonsson, and J. Lussenhop

10:15 SOIL BIOTA IN A CHANGING ENVIRONMENT: MICRO- AND MESOFAUNAL RESPONSES TO ELEVATED ATMOSPHERIC CO₂

Treonis, Amy M. and J. F. Lussenhop

10:30 LINKING C₃ AND C₄ GRASSLAND ROOT AND MYCORRHIZAL FUNGAL PRODUCTION AND TURNOVER TO SOIL ORGANIC MATTER DYNAMICS.

Miller, R. Michael, J.D. Jastrow, J. Lussenhop, and K. Moran

10:45 LINKING ECTOMYCORRHIZAL SPECIES COMPOSITION TO BELOWGROUND FUNCTION AND EXPLORATION TYPES

Hobbie, Erik A

11:00 THE EFFECTS OF HABITAT TYPE IN STRUCTURING ASSEMBLAGES OF ORIBATID MITES

Sylvain, Zachary A. and C.M. Buddle

11:15 FEEDING BY THE ORIBATID MITE SCHELORIBATES ALTERS MICROBIAL ACTIVITY AND CARBON CYCLING

Wickings, Kyle G. and A. S. Grandy

SES Paper Session 7

Invasion Ecology

10:00 – 11:30

Williams

Convener: Michael Weintraub

- 10:00 IS BIODIVERSITY REALLY A BARRIER TO ECOSYSTEM INVASION?:
AN ANALYSIS OF THE MECHANISMS OF PLANT INVASION
Jones, Rachel O. and S. K. Chapman.
- 10:15 THE EFFECT OF GARLIC MUSTARD (*ALLIARIA PETIOLATA*) DENSITY
ON SOIL ENZYME ACTIVITY IN NORTHWEST OHIO
Pisarczyk, Elizabeth W., E.L. Hammer, M.N. Weintraub, and D.L. Moorhead
- 10:30 EXOTIC PLANT *ALLIARIA PETIOLATA* ASSOCIATED WITH CHANGES IN
SOIL RESOURCE AVAILABILITY AND SOIL BIOTA ABUNDANCE AND
FUNCTION
Herrmann, Dustin L, S. J. Morris, K. D. McConnaughay, S. Tun, J. McClain,
and D. S. O'Keefe
- 10:45 A COMPARISON OF PLANT ROOT EXTRACELLULAR ENZYME
ACTIVITIES BETWEEN NATIVE AND EXOTIC PLANTS
Elk, Michael, R. and M.N. Weintraub
- 11:00 IMPACTS OF THE INVASIVE EUROPEAN FIRE ANT (*MYRMICA RUBRA*)
ON COASTAL NEW ENGLAND SOILS
Lin, Mao T., R.K. Thiet, and K.R. Cangialosi
- 11:15 DISCUSSION

11:30-1:00

Lunch

11:30-1:00

SON Lunch with Legends - Boulder Society

11:30-1:00

N. A. Cobb Foundation Meeting - Spruce

SON Paper Session 7

Biological Control

1:00 – 3:00

Sugar Maple

Conveners: Patricia Donald and Ole Becker

- 1:00 BIOLOGICAL CONTROL OF THE ROOT-KNOT NEMATODE
MELOIDOGYNE INCOGNITA BY ALGINATE PELLETS OF *PAECILOMYCES*
LILACINUS AND *POCHONIA CHLAMYDOSPORIA*
Aminuzzaman, F., W. J. Duan, H. Y. Xie, and X. Z. Liu
- 1:15 STUDIES ON BIOCONTROL OF *ROTYLENCHULUS RENIFORMIS* ON
COTTON CROPS

Castillo, Juan D., K. S. Lawrence, G. Morgan-Jones, and E. S. van Santen

1:30 OPTIMIZING SYSTEM FOR ATTACHING *PASTEURIA PENETRANS* TO
ROOT-KNOT NEMATODE AND IN-VIVO CULTIVATION

Bu, Xianxia, H. Jian, Q. He, and Q. Liu.

1:45 IDENTIFICATION OF *PASTEURIA SPP.* THAT PARASITIZE
ROTYLENCHULUS RENIFORMIS

Hewlett, Thomas E., S. R. Stetina, L. M. Schmidt, J. P. Waters, L. J. Simmons
and J. R. Rich.

2:00 *PASTEURIA NISHIZAWAE* STUDIES IN TENNESSEE

Donald, Patricia A. and T. E. Hewlett

SON Paper Session 8

Taxonomy and Systematics

1:00 – 2:30

Jost

Convener: Bradley Hyman

1:00 VARIATION PRESENT IN THE COI GENE OF MELOIDOGYNE AND ITS
POTENTIAL FOR MOLECULAR IDENTIFICATION

Holterman, Martijn H.M., M. Oggenfuss, S. Kiewnick, and J. E. Frey

1:15 EVALUATING PUTATIVE ORTHOLOGS FOR PHYLOGENOMIC
ANALYSIS ACROSS THE PHYLUM NEMATODA

Morris, Krystalynne, T. Fogal, P. J. Hatcher, R.D. Bergeron, P. Datla, and W. K.
Thomas

1:30 STUDIES ON CHRYSANTHEMUM ROOT INFECTION BY NEMATODES
IN MAHALLAT

Sedaghatfar, Ezzatollah, and A. M. Deimi

1:45 MELOIDOGYNE PHYLOGENY: A SUPERTREE APPROACH

Finlinson, Camille E., S. M. Peat, and B. J. Adams

2:00 SPERMATOGENESIS IN *PARACTINOLAIMUS MICRODENTATUS*
(NEMATODA: DORYLAIMIDA: ACTINOLAIMIDAE)

Yushin, Vladimir V.

2:15 ROLLING CIRCLE MITOCHONDRIAL DNA AMPLIFICATION UNMASKS
NEW MERMITHID PARASITISM OF COMMON TERRESTRIAL ISOPODS

Tang, S., G. O. Poinar, Jr., G. Wang, E. G. Platzer, and **B. C. Hyman**