

**REVIEW**

Projecting Insect Voltinism Under High and Low Greenhouse Gas Emission Conditions.

**SHI CHEN, SHELBY J. FLEISCHER, PATRICK C. TOBIN, AND MICHAEL C. SAUNDERS .....** 505

Regulation of Migration in *Mythimna separata* (Walker) in China: A Review Integrating Environmental, Physiological, Hormonal, Genetic, and Molecular Factors.

**XINGFU JIANG, LIZHI LUO, LEI ZHANG, THOMAS W. SAPPINGTON, AND YI HU .....** 516

**POPULATION ECOLOGY**

Between a Rock and a Hard Place: Impact of Nest Selection Behavior on the Altitudinal Range of an Alpine Ant, *Formica neorufibarbis*. **PDF \***

**JOSEPH McCAFFREY AND CANDACE GALEN .....** 534

Populations of the Northern Grasshopper, *Melanoplus borealis* (Orthoptera: Acrididae), in Alaska Are Rarely Food Limited. **PDF \***

**MINGCHU ZHANG AND DENNIS J. FIELDING .....** 541

Factors Influencing the Geographical Distribution of *Dendroctonus rhizophagus* (Coleoptera: Curculionidae: Scolytinae) in the Sierra Madre Occidental, México. **PDF \***

**MA. GUADALUPE MENDOZA, YOLANDA SALINAS-MORENO, ANTONIO OLIVO-MARTÍNEZ,  
AND GERARDO ZÚÑIGA .....** 549

**COMMUNITY AND ECOSYSTEM ECOLOGY**

The Value of Woody Hedgerows for Moth Diversity on Organic and Conventional Farms.

**C. BOUTIN, A. BARIL, S. K. McCABE, P. A. MARTIN, AND M. GUY .....** 560

Differential Effects of Weather and Natural Enemies on Coexisting Aphid Populations. **PDF \***

**ANDREI ALYOKHIN, FRANCIS A. DRUMMOND, GARY SEWELL,  
AND RICHARD H. STORCH .....** 570

Cascading Indirect Effects in a Coffee Agroecosystem: Effects of Parasitic Phorid Flies on Ants and the Coffee Berry Borer in a High-Shade and Low-Shade Habitat. GABRIELLA L. PARDEE AND STACY M. PHILPOTT .....	581
--	-----

## BIOLOGICAL CONTROL—MICROBIALS

Association of <i>Ovavesicula popilliae</i> (Microsporida: Ovavesiculidae) With Winter Mortality of Larvae and Reduced Fecundity of Female Japanese Beetles (Coleoptera: Scarabaeidae). DAVID R. SMITLEY, YOUNG-KI JO, AND IAN HUDSON.....	PDF * 589
---	-----------

## BIOLOGICAL CONTROL—WEEDS

Effect of Several Different Pollens on the Bio-Ecological Parameters of the Predatory Mite <i>Typhlodromus athenas</i> Swirski and Ragusa (Acari: Phytoseiidae). P. D. KOLOKYTHA, A. A. FANTINOU, AND G. TH. PAPADOULIS.....	597
Biology and Host Range of <i>Tecmessa elegans</i> (Lepidoptera: Notodontidae), a Leaf-Feeding Moth Evaluated as a Potential Biological Control Agent for <i>Schinus terebinthifolius</i> (Sapindales: Anacardiaceae) in the United States. MARINA OLEIRO, FERNANDO MCKAY, AND GREGORY S. WHEELER.....	605

## PLANT–INSECT INTERACTIONS

Pollination Value of Male Bees: The Specialist Bee <i>Peponapis pruinosa</i> (Apidae) at Summer Squash ( <i>Cucurbita pepo</i> ). JAMES H. CANE, BLAIR J. SAMPSON, AND STEPHANIE A. MILLER.....	614
Forested Landscapes Promote Richness and Abundance of Native Bees (Hymenoptera: Apoidea: Anthophila) in Wisconsin Apple Orchards. J. C. WATSON, A. T. WOLF, AND J. S. ASCHER .....	621
Field and Vegetable Crops as Hosts of Larval Western Spotted Cucumber Beetle (Coleoptera: Chrysomelidae). ANDREW B. PEDERSEN AND LARRY D. GODFREY .....	633
Endophyte-Mediated Resistance to Black Cutworm as a Function of Plant Cultivar and Endophyte Strain in Tall Fescue. MICHAEL W. BALDAUF, WADE J. MACE, AND DOUGLAS S. RICHMOND .....	639
Interspecific Variation in Resistance of Asian, European, and North American Birches ( <i>Betula</i> spp.) to Bronze Birch Borer (Coleoptera: Buprestidae). DAVID G. NIELSEN, VANESSA L. MUILENBURG, AND DANIEL A. HERMS .....	648
Spatial Variability of Western Bean Cutworm (Lepidoptera: Noctuidae) Pheromone Trap Captures in Sprinkler Irrigated Corn in Eastern Colorado. SCOTT C. MERRILL, SHAWN M. WALTER, FRANK B. PEAIRS, AND JENNIFER A. HOETING .....	654

## BEHAVIOR

Direct Sampling of Resting Codling Moth (Lepidoptera: Tortricidae) Adults in Apple Tree Canopies and Surrounding Habitats. DAVID L. EPSTEIN, JAMES R. MILLER, MATTHEW J. GRIESHOP, LUKASZ L. STELINSKI, AND LARRY J. GUT .....	661
Inhibition of Microorganisms on a Carrion Breeding Resource: The Antimicrobial Peptide Activity of Burying Beetle (Coleoptera: Silphidae) Oral and Anal Secretions. CARRIE L. HALL, NICHOLAS K. WADSWORTH, DANIEL R. HOWARD, ELEANOR M. JENNINGS, LARRY D. FARRELL, TIMOTHY S. MAGNUSON, AND ROSEMARY J. SMITH .....	669

## SAMPLING

Detectability of the Emerald Ash Borer (Coleoptera: Buprestidae) in Asymptomatic Urban Trees By Using Branch Samples.

KRISTA L. RYALL, JEFFREY G. FIDGEN, AND JEAN J. TURGEON ..... 679

Spatial Dependence, Dispersion, and Sequential Sampling of *Anaphothrips obscurus* (Thysanoptera: Thripidae) in Timothy.  \*

DOMINIC D. REISIG, LARRY D. GODFREY, AND DANIEL B. MARCUM ..... 689

## PEST MANAGEMENT

Influence of Native Flowering Plant Strips on Natural Enemies and Herbivores in Adjacent Blueberry Fields.

NATHANIEL J. WALTON AND RUFUS ISAACS ..... 697

Comparison of Trapping for Eggs, Females, and Males of the Naval Orangeworm (Lepidoptera: Pyralidae) in Almonds.

CHARLES S. BURKS, BRADLEY S. HIGBEE, JOEL P. SIEGEL, AND DAVID G. BRANDL ..... 706

## CHEMICAL ECOLOGY

Contact Sex Pheromones Identified for Two Species of Longhorned Beetles (Coleoptera: Cerambycidae) *Tetropium fuscum* and *T. cinnamopterum* in the Subfamily Spondylidinae.  \*

PETER J. SILK, JON SWEENEY, JUNPING WU, STEPHANIE SOPOW, PETER D. MAYO, AND DAVID MAGEE ..... 714

A Compound Produced by Fruivorous Tephritidae (Diptera) Larvae Promotes Oviposition Behavior by the Biological Control Agent *Diachasmimorpha longicaudata* (Hymenoptera: Braconidae).

CHARLES STUHL, JOHN SIVINSKI, PETER TEAL, BEATRIZ PARAHOS, AND MARTIN ALUJA ..... 727

## PHYSIOLOGICAL ECOLOGY

Temperature Influences the Handling Efficiency of an Aphid Parasitoid Through Body Size-Mediated Effects.

G.-M. WU, M. BARRETTE, G. BOIVIN, J. BRODEUR, L.-A. GIRALDEAU, AND T. HANCE ..... 737

## TRANSGENIC PLANTS & INSECTS

The Impact of Transgenic Wheat Expressing GNA (snowdrop lectin) on the Aphids *Sitobion avenae*, *Schizaphis graminum*, and *Rhopalosiphum padi*.

JIN MIAO, YUQING WU, WEIGANG XU, LIN HU, ZHENXING YU, AND QIONGFANG XU ..... 743

Evaluating the Non-Rice Host Plant Species of *Sesamia inferens* (Lepidoptera: Noctuidae) as Natural Refuges: Resistance Management of Bt Rice.

ZHUORONG LIU, YULIN GAO, JU LUO, FENGXIANG LAI, YUNHE LI, QIANG FU, AND YUFA PENG ..... 749

\* Articles indicated as "PDF" are freely available online because the author has purchased an open access reprint in the PDF format. For online access, go to: <http://esa.publisher.ingentaconnect.com/content.esa>.