

# Agricultural and Forest Entomology

Volume 14, Number 4, November 2012

## Contents

### Original Articles

- 331 Dispersal and spatial distribution of western corn rootworm larvae in relation to root phenology  
*Mario Schumann and Stefan Vidal*
- 340 The phenological window for western spruce budworm: seasonal decline in resource quality  
*Vincent G. Nealis*
- 348 The effect of temperature on the development and life cycle regulation of the pine weevil *Hylobius abietis* and the potential impacts of climate change  
*Daegan J. G. Inward, David Wainhouse and Andrew Peace*
- 358 Predicting the distribution of the two bark beetles *Tomicus destruens* and *Tomicus piniperda* in Europe and the Mediterranean region  
*Agnès Horn, Carole Kerdelhué, François Lieutier and Jean-Pierre Rossi*
- 367 Area-wide application of verbenone-releasing flakes reduces mortality of whitebark pine *Pinus albicaulis* caused by the mountain pine beetle *Dendroctonus ponderosae*  
*Nancy E. Gillette, E. Matthew Hansen, Constance J. Mehmel, Sylvia R. Mori, Jeffrey N. Webster, Nadir Erbilgin and David L. Wood*
- 376 Species abundance patterns of coccinellid communities associated with olive, chestnut and almond crops in north-eastern Portugal  
*Sónia A. P. Santos, Armando Raimundo, Albino Bento and José A. Pereira*
- 383 Felling date affects the occurrence of *Pityogenes chalcographus* on Scots pine logging residues  
*Jiří Foit*
- 389 Prevalence, transmission and mortality associated with *Nosema fumiferanae* infections in field populations of spruce budworm *Choristoneura fumiferana*  
*Eldon S. Eveleigh, Christopher J. Lucarotti, Peter C. McCarthy and Benoit Morin*
- 399 Dispersal ability in codling moth: mark–release–recapture experiments and kinship analysis  
*John T. Margaritopoulos, Costas Ch. Voudouris, Jérôme Olivares, Benoit Sauphanor, Zissis Mamuris, John A. Tsitsipis and Pierre Franck*
- 408 Spatiotemporal distribution of the hemlock woolly adelgid predator *Laricobius nigrinus* after release in eastern hemlock forests  
*Gina A. Davis, Scott M. Salom, Carlyle C. Brewster, Bradley P. Onken and Loke T. Kok*
- 419 Diversity in *Eucalyptus* susceptibility to the gall-forming wasp *Leptocybe invasa*  
*Gudrun Dittrich-Schröder, Michael J. Wingfield, Brett P. Hurley and Bernard Slippers*
- 428 Biological control of the fruit-spotting bug *Amblypelta lutescens* using weaver ants *Oecophylla smaragdina* on African mahoganies in Australia  
*Renkang Peng, Keith Christian and Don Reilly*

Author and keyword index

Volume contents