

CONTENTS

ARTICLES

- 277 A karyotype study on the pseudoscorpion families Geogarypidae, Garypinidae and Olpiidae (Arachnida: Pseudoscorpiones) — F. ŠTÁHLAVSKÝ, J. KRÁL, M.S. HARVEY & C.R. HADDAD
- 291 A bumblebee thioredoxin-like protein gene that is up-regulated by a temperature stimulus and lipopolysaccharide injection — Y.S. CHOI, K.S. LEE, H.J. YOON, I. KIM, H.D. SOHN & B.R. JIN
- 297 Unusual complement of three AKH octapeptides in two species of grasshoppers (Caelifera) — G. GÄDE
- 305 Haemolymph amino acid, sugar and glycerol levels in the Namib Desert tenebrionid *Physadesmia globosa* (Coleoptera: Tenebrionidae) during dehydration and rehydration — S.G. NAIDU
- 311 Kairomone involvement in the host specificity of the egg parasitoid *Trissolcus basalis* (Hymenoptera: Scelionidae) — G. SALERNO, E. CONTI, E. PERI, S. COLAZZA & F. BIN
- 319 Regular periods of abdominal contractions recorded from larvae of the bumblebee, *Bombus terrestris* (Hymenoptera: Apidae) — M. MÄND, A. KUUSIK, A.-J. MARTIN, I.H. WILLIAMS, A. LUUK, R. KARISE, L. METSPALU & K. HIEESAAR
- 323 Comparison of the incidence of sibling cannibalism between male-killing *Spiroplasma* infected and uninfected clutches of a predatory ladybird beetle, *Harmonia axyridis* (Coleoptera: Coccinellidae) — K. NAKAMURA, K. MIURA, P. DE JONG & H. UENO
- 327 Life history and reproductive behavior of the endemic Hawaiian *Anomalochrysa hepatica* (Neuroptera: Chrysopidae): A comparative approach — M.J. TAUBER, C.A. TAUBER & T.W. HILTON
- 337 Effect of temperature and photoperiod on the life cycle in lineages of *Myzus persicae nicotianae* and *Myzus persicae* s. str. (Hemiptera: Aphididae) — D. POPOULIDOU, J.T. MARGARITOPOULOS, T.E. KEPHALOGLIANNI, K.D. ZARPAS & J.A. TSITSIPIS
- 347 Life-history variation in three coexisting species of carnid flies (Diptera: Carnidae), *Carnus hemapterus*, *Hemeromyia anthracina* and *Hemeromyia longirostris* — F. VALERA, M. MARTÍN-VIVALDI & M. CARLES-TOTRÁ
- 355 The mechanism of the emergence of *Cotesia kariyai* (Hymenoptera: Braconidae) larvae from the host — Y. NAKAMATSU, T. TANAKA & J.A. HARVEY
- 361 Consumption of fresh and buried seed by ground beetles (Coleoptera: Carabidae) — Z. MARTINKOVÁ, P. SASKA & A. HONĚK
- 365 Parasitoid complex and parasitism rates of the horse chestnut leafminer, *Cameraria ohridella* (Lepidoptera: Gracillariidae) in the Czech Republic, Slovakia and Slovenia — L. VOLTER & M. KENIS
- 371 Responses of *Sitophilus oryzae* (Coleoptera: Curculionidae) and *Tribolium confusum* (Coleoptera: Tenebrionidae) to traps baited with pheromones and food volatiles — C.G. ATHANASSIOU, N.G. KAVALLIERATOS & P. TREMATERRA
- 379 Complex phenological responses to climate warming trends? Lessons from history — T.H. SPARKS, K. HUBER & R.L.H. DENNIS
- 387 Phytophagous insects of giant hogweed *Heracleum mantegazzianum* (Apiaceae) in invaded areas of Europe and in its native area of the Caucasus — S.O. HANSEN, J. HATTENDORF, R. WITTENBERG, S.YA. REZNIK, C. NIELSEN, H.P. RAVN & W. NENTWIG
- 397 A comparison of three trapping methods used to survey forest-dwelling Coleoptera — E. HYVÄRINEN, J. KOUKAI & P. MÄRTIKAINEN
- 409 The head morphology of *Ascioplaga mimeta* (Coleoptera: Archostemata) and the phylogeny of Archostemata — T. HÖRNSCHEMEYER, J. GOEBBELS, G. WEIDEMANN, C. FABER & A. HAASE
- 425 The male genitalia segments in fritillary butterflies: Comparative morphology with special reference to the “rectal plate” in *Issoria* (Lepidoptera: Nymphalidae) — T.J. SIMONSEN
- 433 Morphological separation of *Tomicus piniperda* and *T. destruens* (Coleoptera: Curculionidae: Scolytinae): new and old characters — M. FACCOLI
- 443 Testing molecular barcodes: Invariant mitochondrial DNA sequences vs the larval and adult morphology of West Palaearctic *Pandasyophthalmus* species (Diptera: Syrphidae: Paragini) — S. ROJO, G. STÄHLS, C. PÉREZ-BAÑÓN & M.Á. MARCOS-GARCÍA
- 459 Phylogeny of *Chrysotoxum* species (Diptera: Syrphidae) inferred from morphological and molecular characters — A. MASETTI, A. LUCHETTI, D. SOMMAGGIO, G. BURGIO & B. MANTOVANI
- 469 More than one species of *Messor* harvester ants (Hymenoptera: Formicidae) in Central Europe — B.C. SCHLICK-STEINER, F.M. STEINER, H. KONRAD, B. MARKÓ, S. CSÓSZ, G. HELLER, B. FERENCZ, B. SIPOS, E. CHRISTIAN & C. STAUFFER
- 477 *Phaenoglyphis* “versus” *Hemicrisis*, and the description of a new sculptured species of Charipinae (Hymenoptera: Figitidae) — J. PUJADE-VILLAR & J. PARETAS-MARTÍNEZ
- 483 The genus *Amiota* (Diptera: Drosophilidae) from Hengduan Mountains, southwestern China — W. ZHANG & H. CHEN

NOTES

- 497 Unusual host plant of *Hoplitis pici*, a bee with hooked bristles on its mouthparts (Hymenoptera: Megachilidae: Osmiini) — A. MÜLLER
- 501 Biological and ecological studies on *Scymnus syriacus* and *Scymnus levaillanti* (Coleoptera: Coccinellidae) — T.F. AL-LAWI