

## International publications reviewed by referees and listed in SCI

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Karlhofer, J., Schafellner, C., Hoch, G.\* 2012: Reduced activity of juvenile hormone esterase in microsporidia-infected *Lymantria dispar* larvae. *J. Invertebr. Pathol.*

Meurisse, N.\*, Hoch, G., Schopf, A., Battisti, A., Gregoire, J.-C. 2012: Low temperature tolerance and starvation ability of the oak processionary moth: implications in a context of increasing epidemics. *Agric. For. Entomol.*

Goertz, D.\*, Hoch, G. 2011: Modeling horizontal transmission of microsporidia infecting gypsy moth, *Lymantria dispar* (L.), larvae. *Biol. Contr.* **56**, 263-270.

Hoch, G.\*, Petrucco Toffolo, E., Netherer, S., Battisti, A., Schopf, A. 2009: Survival at low temperature of larvae of the pine processionary moth, *Thaumetopoea pityocampa* from an area of range expansion. *Agric. For. Entomol.* **11**, 313-320.

Goertz, D.\*, Hoch, G. 2009: Three microsporidian pathogens infecting *Lymantria dispar* larvae do not differ in their success in horizontal transmission. *J. Appl. Ent.* **133**, 568-570.

Hendrichs, J.\*, Bloem, K., Hoch, G., Carpenter, J.E., Greany, P., Robinson, A.S. 2009: Improving the cost-effectiveness, trade and safety of biological control for agricultural insect pests using nuclear techniques. *Biocontr. Sci. Techn.* **19**, S1, 3-22.

Hoch, G.\*, Solter, L.F., Schopf, A. 2009: Treatment of *Lymantria dispar* (Lepidoptera, Lymantriidae) host larvae with polydnavirus/venom of a braconid parasitoid increases spore production of entomopathogenic microsporidia. *Biocontr. Sci. Techn.* **19**, S1, 35-42.

Hoch, G.\*, Marktl, R.C., Schopf, A. 2009: Gamma radiation-induced pseudoparasitization as a tool to study interactions between host insects and parasitoids in the system *Lymantria dispar* (Lep., Lymantriidae) - *Glyptapanteles liparidis* (Hym., Braconidae). *Biocontr. Sci. Techn.* **19**, S1, 23-34.

Hoch, G.\*, Pilarska, D.K., Dobart, N. 2009: Effect of midgut infection with the microsporidium *Endoreticulatus schubergi* on carbohydrate and lipid levels in *Lymantria dispar* larvae. *J. Pest Sci.* **82**, 351-356.

Hoch, G., D'Amico, V.\*, Solter, L.F., Zubrik, M., McManus, M.L. 2008: Quantifying horizontal transmission of *Nosema lymantriae*, a microsporidian pathogen of the gypsy moth, *Lymantria dispar* (Lep., Lymantriidae) in field cage studies. *J. Invertebr. Pathol.* **99**, 146-150.

Goertz, D.\*, Hoch, G. 2008: Vertical transmission and overwintering of microsporidia in the gypsy moth, *Lymantria dispar*. *J. Invertebr. Pathol.* **99**, 43-48.

- Goertz, D., Hoch, G.\* 2008: Horizontal transmission pathways of terrestrial microsporidia: A quantitative comparison of three pathogens infecting different organs in *Lymantria dispar* L. (Lep.: Lymantriidae) larvae. *Biol. Control* **44**, 196-206.
- Pilarska, D.K., Solter, L.F., Kereselidze, M., Linde, A., and Hoch, G.\* 2006: Microsporidian infections in *Lymantria dispar* larvae: Interactions and effects of multiple species infections on pathogen horizontal transmission. *J. Invertebr. Pathol.* **93**, 105-113
- Vavra, J., Hylis, M., Vossbrinck, C.R., Pilarska, D.K., Linde, A., Weiser, J., McManus, M.L., Hoch, G. and Solter, L.F.\* , 2006: *Vairimorpha disparis* n. comb. (Microsporidia: Burenellidae): A redescription and taxonomic revision of *Thelohania disparis* Timofejeva 1956, a microsporidian parasite of the gypsy moth *Lymantria dispar* (L.) (Lepidoptera: Lymantriidae). *J. Eukaryot. Microbiol.* **53**, 292-304
- Hoch, G.\*, Solter, L.F., and Schopf, A., 2004: Hemolymph melanization and alterations in hemocyte numbers in *Lymantria dispar* larvae following infections with different entomopathogenic microsporidia. *Entomol. Exp. Appl.* **113**, 77-86
- Tillinger, N.A., Hoch, G.\* , and Schopf, A., 2004: Effects of parasitoid associated factors of the endoparasitoid *Glyptapanteles liparidis* (Hymenoptera: Braconidae). *Eur. J. Entomol.* **101**, 243-249
- Hoch, G., Schafellner, C., Henn, M.W., and Schopf, A.\* , 2002: Alterations in carbohydrate and fatty acid levels of *Lymantria dispar* larvae caused by a microsporidian infection and potential adverse effects on a co-occurring endoparasitoid, *Glyptapanteles liparidis*. *Arch. Insect Biochem. Physiol.* **50**, 109-120
- Gschwantner, T., Hoch, G.\* , and Schopf, A., 2002: Impact of predators on artificially augmented populations of *Lymantria dispar* L. pupae (Lepidoptera, Lymantriidae). *J. Appl. Ent.* **126**, 66-73
- Hoch, G.\* , and Schopf, A., 2001: Effects of *Glyptapanteles liparidis* (Hym.: Braconidae) parasitism, polydnavirus, and venom on development of microsporidia infected and uninfected *Lymantria dispar* (Lep.: Lymantriidae) larvae. *J. Invertebr. Pathol.* **77**, 37-43
- Hoch, G.\* , Zubrik, M., Novotny, J., and Schopf, A., 2001: The natural enemy complex of the gypsy moth, *Lymantria dispar* (Lep., Lymantriidae) in different phases of its population dynamics in eastern Austria and Slovakia – a comparative study. *J. Appl. Ent.* **125**, 1-11
- Hoch, G.\* , Schopf, A., and Maddox, J.V., 2000: Interactions between an entomopathogenic microsporidium and the endoparasitoid *Glyptapanteles liparidis* within their host, the gypsy moth larva. *J. Invertebr. Pathol.* **75**, 59-68

Schopf, A.\* , and Hoch, G., 1997: Zur Bionomie von *Glyptapanteles liparidis* (Hymenopt., Braconidae), als Regulator von *Lymantria dispar* (Lepidopt., Lymantriidae), in Gebieten mit unterschiedlichen Populationsdichten. *J. Appl. Ent.* **121**, 195-203

#### **Journal articles, reviewed by referees, not listed in SCI**

Kereselidze, M.B.\* , Pilarska, D.K., Linde, A., Hoch, G. 2010: Influence of *Endoreticulatus schubergi* (Microsporidia) on growth and development of *Lymantria dispar* (Lepidoptera: Lymantriidae) larvae. *Annals Agr. Sci.*, **8**, 10-13

Hoch, G.\* , Goertz, D. 2009: Understanding transmission of microsporidia: A prerequisite for their use in inoculative biological control of forest insects. *Mitt. dtsh. Ges. Allg. Angew. Ent.* **17**, 89-93

Pollan, S., Goertz, D., Hoch, G.\* 2009: Effect of temperature on development of the microsporidium *Nosema lymantriae* and disease progress in the host *Lymantria dispar* (L. 1758). *Mitt. dtsh. Ges. Allg. Angew. Ent.*, **17**, 173-178

Kereselidze, M.\* , Pilarska, D.K., Linde, A., Hoch, G. 2009: Infection of *Lymantria dispar* (Lep.: Lymantriidae) larvae with the midgut pathogen *Endoreticulatus schubergi* (Microsporidia) has little influence on growth and development of the host. *IOBC/wprs Bull.* **45**, 495-498.

Hoch, G.\* , Verucchi, S., and Schopf, A. 2008: Microsporidian pathogens of the oak processionary moth, *Thaumetopoea processionea* (L.) (Lep., Thaumetopoeidae), in eastern Austria's oak forests. *Mitt. dtsh. Ges. Allg. Angew. Ent.* **16**, 225-228

Hoch, G.\* , Kalbacher, G., and Schopf, A., 2006: Gypsy moth revisited – studies on the natural enemy complex of *Lymantria dispar* L. (Lep., Lymantriidae) during an outbreak in a well known gypsy moth area. *Mitt. dtsh. Ges. Allg. Angew. Ent.* **15**, 201-204

Glavendekic, M.\* , Pilarska, D., Mihajlovic, L., Linde, A., Kolling, T., Hoch, G., 2006: Microsporidian infections in *Lymantria dispar* L. (Lepidoptera, Lymantriidae) populations in Serbia. In: Rakonjac, L. (Ed.), International Scientific Conference: Sustainable Use of Forest Ecosystems. Institute of Forestry, Belgrade. pp. 275-279

Hoch, G.\* , Schafellner, C., Henn, M.W., Maddox, J.V., and Schopf, A., 2001: Veränderung der Wirtsqualität von *Lymantria dispar* Larven für die endoparasitische Entwicklung der Braconide *Glyptapanteles liparidis* durch eine Mikrosporidieninfektion. *Mitt. dtsh. Ges. Allg. Angew. Ent.* **13**, 437-440

Schopf, A.\* , Hoch, G., Klaus, A., Novotny, J., Zubrik, M., and Schafellner, C., 1999: Influence of food quality of two oak species on the development and growth of gypsy moth larvae. In: Lieutier, F., Mattson, W. J., Wagner, M. R. (eds.): Physiology and genetics of tree-phytophage interactions. *Les Colloques* **90**, 231-247, INRA, Paris

Schopf, A.\*, Hoch, G., Klaus, A., and Schafellner, C., 1999: Suitability of two oak species, *Quercus petraea* and *Q. cerris*, for development and growth of gypsy moth larvae. *IOBC Bull.* **22**, 95-100

Hoch, G.\*, and Schopf, A., 1995: Der Parasitoidenkomplex des Schwammspinners, *Lymantria dispar* L. (Lep., Lymantriidae) in Populationen hoher, mittlerer und niedriger Dichte im Burgenland. *Mitt. Dtsch. Ges. allg. angew. Ent.* **10**, 195-198

### **Book chapter in press**

Hoch, G.: A gyapjaslepke kórokozói [Pathogens of gypsy moth; translation from English by G. Csóka]. In: Csóka, G., Varga, S. (eds.): A gyapjalepke. Agroinform Publishing House and Hungarian Forest Research Institute.

### **Academic theses**

Hoch, G. 2008: Ecological and physiological interactions between entomopathogenic microsporidia and their host insect, *Lymantria dispar* (Lep.: Lymantriidae). Habilitation thesis, BOKU Universität für Bodenkultur, Vienna

Hoch, G. 1999: Wechselwirkungen zwischen einer entomopathogenen Mikrosporidie und dem Endoparasitoiden *Glyptapanteles liparidis* in ihrem gemeinsamen Wirt, der *Lymantria dispar* Larve. PhD thesis, BOKU Universität für Bodenkultur, Vienna