

Entomopathogens (Protozoans, Microsporidians and Fungi) of Alien Insects from Bulgaria: Check-list and Distribution

Daniela Pilarska¹, Vassil Golemansky¹, Danail Takov¹, Milka Glavendekic², Rumen Tomov³

¹Institute of Zoology, Bulgarian Academy of Sciences, Sofia, Bulgaria;
E-mails: dpilarska@yahoo.com; golemansky@zoology.bas.bg, dtakov@yahoo.com

²University of Belgrade, Serbia, E-mail: milka.glavendekic@nadlanu.com,

³University of Forestry, Sofia, Bulgaria; E-mail: rtomov@yahoo.com

Abstract: Entomopathogens, including protozoans, microsporidians and fungi are commonly isolated from insects and some of them have potential for biological control programs. The last thirty years an increase of the records of alien invasive insects was observed in Bulgaria. So far 270 alien insect species are registered in the country and around 48 species of them are regarded as economically important pests. However the entomopathogens of the alien invasive insects in Bulgaria are insufficiently investigated. In order to activate and facilitate the future investigations of the entomopathogens in the country we propose a review and check-list of the entomopathogens, described and reported from Bulgarian alien and invasive insects. A part of them are known from other countries so far, but their presence in Bulgarian alien insect fauna is possible too and they are also included in the review. Up to now, a total of 56 natural occurring entomopathogens were established in the Bulgarian alien invasive insects – 22 protozoans, 14 microsporidians and 20 fungi. Brief data about their geographical distribution are presented.

Key words: Bulgaria, alien insects, entomopathogens, Protozoa, Fungi, Microsporidia.