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A NEW SPECIES OF *HEMISARCOPTES* LIGNIÈRES, 1893 (ACARI: HEMISARCOPTIDAE) FROM ORNAMENTAL TREES IN HUNGARY

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SUMMARY - *Hemisarcoptes budensis* sp.n. (Acari: Hemisarcoptidae) is described from adults and immatures, including deutonymphs, from Budapest, Hungary. The adult mites were collected from trees and shrubs infested with six armored scale species. The deutonymphs were found beneath the elytra of ladybirds (Coleoptera: Coccinellidae), especially *Chilocorus renipustulatus*, more rarely *C. bipustulatus*, visiting the infested trees.

Key words -Acari, systematics, *Hemisarcoptes*, Hungary.

INTRODUCTION

The new species described here was discovered during the course of a study on the insects and mites parasitic on ornamental plants in Budapest. This study was initiated by the junior author in 1990 (Ripka *et al.*, 1990 and 1996).

All our observations were made in Budapest, especially in the Botanical Garden of the University of Horticulture and Food Industry, District XI at Buda. Budapest is separated in two parts by the Danube. Buda is a hilly part whereas Pest is a plain.

The adults, tritonymphs, protonymphs and larvae of *H. budensis* were collected from six species of armored scales, attacking 13 species of ornamental trees or shrubs belonging to 10 genera and seven families. We list the scale insects which were infested with this hemisarcoptid mite:

1. *Pseudaulacaspis pentagona* (Targioni-Tozzetti): It was most frequently encountered species. It was found on six plant species, i.e. *Euonymus europaeus* (Fam. Celastraceae), Budapest XI, 27 Jan.1995 and 15 June 1997; *Fraxinus angustifolia* (Oleaceae), Budapest II, 8 February 1991, *F. pennsylvanica*, Budapest II, 8 February 1991; *Phellodendron amurense* (Rutaceae), Budapest XIII, 20 February 1991; *Rhus typhina* (Anacardiaceae), Budapest X, 4 January 1995; *Sophora japonica* (Fabaceae), Budapest II, 11 February 1991.

2. *Unaspis euonymi* (Comstock): Found on *Euonymus europaeus*, Budapest XI, 15 June 1997. This shrub was heavily infested with this scale insect.

3. *Epidiaspis leperii* (Signoret): Found on five species of Rosaceae: *Crataegus laevigata*, Budapest XI; *Malus baccata*, Budapest XI; *Prunus domestica*, Budapest XV; *Pyrus betulifolia*, Budapest XI and *P. pyraster*, Budapest VIII, all collected in January 1991 and 1995.

4. *Chionaspis salicis* (L.): From *Populus canescens* (Salicaceae), Budapest III, April 1991 and *P. simonii*, Budapest XI, February 1991.

5. *Quadraspidiotus gigas* (Thiem & Gerneck): From *Populus simonii*, Budapest XI, September 1991.

6. *Lepidosaphes ulmi* (L.): From *Fraxinus angustifolia*, Budapest III, September 1991.

Attempts to find hemisarcoptids on fruit trees or shrubs, e.g. pear, peach, cherry and currants, were unsuccessful.

Almost all the deutonymphs of *H. budensis* sp.n. were found beneath the elytra of *Chilocorus renipustulatus* (Scriba) and only a few specimens from the much more scarce *C. bipustulatus* (L.). The infested ladybirds were collected from *Celastrus orbiculatus* and *Euonymus europaeus* (September and November 1997).

All measurements are given in micrometers (μm). Setal nomenclature of idiosoma follows Fain *et al.* (1995).