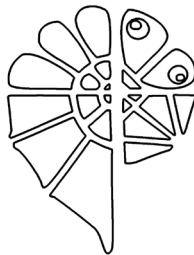


Bulletin

of

the Natural History Museum in Belgrade



Natural History Museum Belgrade, 2008
Volume 1

ISSN 1820-9521

Biology

**THE FIRST RECORD OF *THERMOTHRIPS MOHELENSIS*
PELIKÁN, 1949 (THYSANOPTERA, THIRIPIDAE)
IN SLOVENIA**

HALINA KUCHARCZYK

Department of Zoology Maria Curie-Skłodowska University.
Akademicka 19, 20-033 Lublin, Poland.

E-mail: halina.kucharczyk@poczta.umcs.lublin.pl

Thermothrips mohelensis Pelikan, 1949 was recorded for the first time in Slovenia and in the Balkan region. Its morphological characters, ecology, distribution and notice about threat status are given.

Key words: *Thermothrips mohelensis*, *Thripidae*, distribution, threat status, new record

INTRODUCTION

Thermothrips mohelensis was described in 1949 by Jaroslav Pelikán from Mohelno (Czech Republic) as a subgenus of *Anaphothrips*. Both females and males were collected from *Galium verum* in a unique steppe-like area. In previous keys to Thysanoptera order, it was mentioned among species belonging to the genus *Anaphothrips* (Priesner 1964; Schliephake & Klimt 1979). The newest key, zur Strassen (2003), established it as a singular species in the genus *Thermothrips*, repeated the information about the host plant and added new locations from

west Russia, Turkey and Poland. Taking the habitat and host plants into consideration, zur Strassen characterised this species as thermophilous. Information about the location is accessible also on the Fauna Europaea website (Anonymous 2007).

MATERIAL AND METHODS

One female of this species was collected on 19.09.2007 in Hrastovlje (a small village in south-western Slovenia, Primorska Region) by shaking *Satureja montana* plants. The plants grow on dry grassland surrounding the historical monument, the church of St. Trinity. Photos of the body and characters were taken using an Olympus AX microscope (Figs 1-4).

RESULTS AND DISCUSSION

Thermothrips mohelensis is a species close to the *Rubiothrips* species group with a narrow distance between dorsal setae 1 on abdomen segments and the lack of comb on the VIII abdominal segment (Fig. 1). Its internal posteromarginal setae on its pronotum are longer (33-39 μm) and its sense cone on the 3rd antennal segment is singular, in contrast to the mini pronotal setae and forked sense cone characteristic of the other species of *Rubiothrips* genus. Its antennae and body are completely dark with somewhat paler distal parts of tibiae and feet (Figs 2, 3, 4). Until now the only species belonging to the genus *Galium* were recorded as specific host plants for *Thermothrips mohelensis*; the presence of it on *Satureja montana* was probably accidental or it was a substitute plant when the main host plant stopped flowering.

Besides the first notice of *Thermothrips mohelensis* in Mohelno, Pelikán noted this species also in Pavlovskè Vrchy (Pálava Biosphere Reserve, Czech Republic), in limestone hills with steppe ecosystems; in this case it was collected from *Galium mollugo*. *Thermothrips mohelensis* was characterised by the author as a monophagous, floricolous and xerophilous species with low frequency (11-25%) and abundance (10-20%) in the area researched (Pelikán 1995).

Apart from the specimens in the Czech Republic, three females of *Thermothrips mohelensis* were found by Oettingen on 09.06.1940 in the vicinity of Gorzów Wielkopolski on the Warta River (western Poland, former Germany) and identified as *Anaphothrips silvarum*. After World War II, the material was deposited in the collection of the Plant Protection Institute in Eberswalde (former Eastern Germany). In 1956, Titschack reviewed the collection and Oettingens' identification.

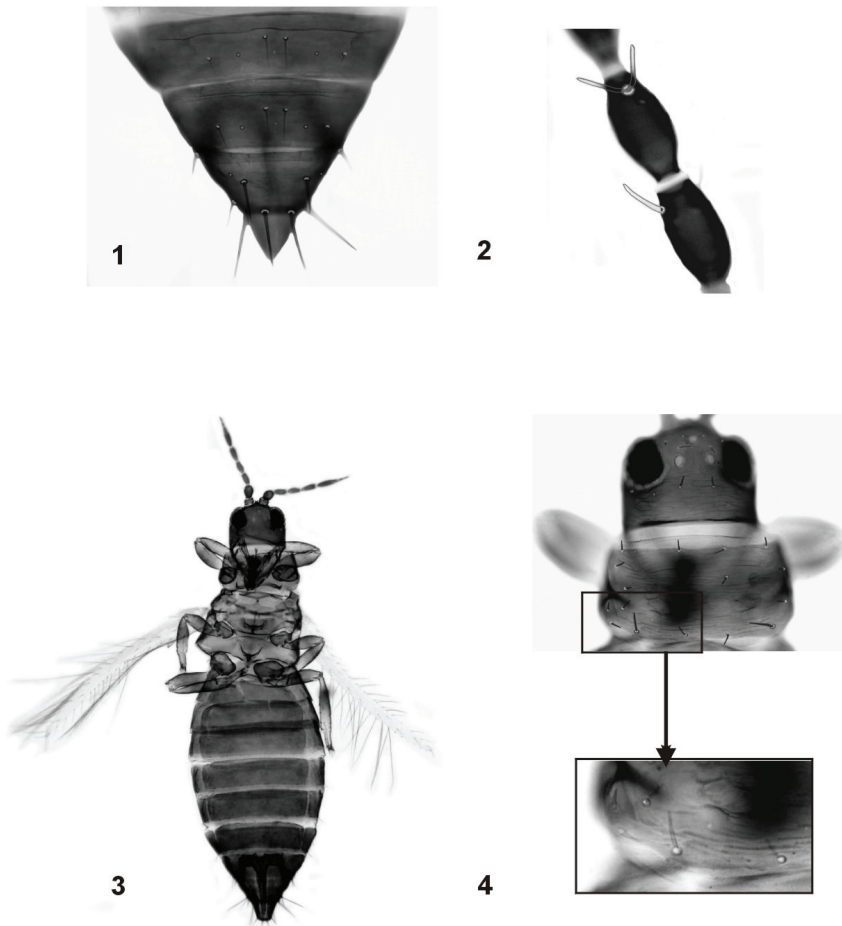


Fig. 1-4. - Characters of *Thermothrips mohelensis*.

1 - abdominal terga VII-X, 2 – antennal segment III with single sense cone and IV with forked sense cone, 3 - ventral side of body, 4 – head and pronotum - magnificated area with posteromarginal. setae. All figures without scale.

In 1972, Schliephake published the notice about this species as new for Poland; following him, Zawirska (1988) mentioned the species in the checklist of Polish Thysanoptera.

In the Czech Republic and in Poland, *Thermothrips mohelensis* is a very rare species. In the Czech Republic it was classified as endangered (EN) - with a very high risk of extinction in the wild - on the Red List of threatened species (Pelikán 2005). In Poland, it has not been noticed since 1940 and is probably extinct now (Kucharczyk 2007; Kucharczyk & Kucharczyk *in press.*). The disappearance of a rare species occurring in xerothermic grasslands is most often connected with secondary succession of this kind of habitat and anthropopression.

The last factor may be the main threat to *Thermothrips mohelensis* in its new station in Hrastovlje. The small Mediterranean village which is known for the Romanic church of the Holy Trinity is visited every year by thousands of tourists who destroy the dry grasslands surrounding the church.

REFERENCES

- Anonymous (2007): Fauna Europaea (version 1.3). [http://www.faunaeur.org/tax_resources.php].
- Kucharczyk, H. (2007): Wciornastki (Thysanoptera). In Bogdanowicz W., Chudzicka E., Pilipiuk E., Skibińska E. (eds): Fauna of Poland. Characteristic and checklist of species 2: 391-398. - Institute of Zoology PAS, Warsaw.
- Kucharczyk H., Kucharczyk M. (*in press*): The red list of threatened Thrips species (Thysanoptera, Insecta) of middle-eastern Poland. Acta Phytopathologica and Entomologica *Hungarica*.
- Pelikán J. (1995): Thysanoptera. In Rozkosny R., Vanhara J. (eds): Terrestrial Invertebrates of the Pálava Biosphere Reserve of UNESCO 1. Folia Fac. Sci. Nat. Uni. Masaryk. Brun., Biol. **92**: 137-146.
- Pelikán, J. (2005): Thysanoptera (třásnokřídli). In Farkač J., Král D., Škorpík M. (eds): Red list of threatened species in the Czech Republic, Invertebrates: 138-139. - Agentura ochrany přírody a krajiny ČR, Praha.
- Priesner H. (1964): Thysanoptera (Fransenflügler, Thripse). In Bestimmungsbücher zur Bodenfauna Europas 2: 1-242. – Berlin.
- Schliephake G. (1972): Bemerkungen zur Systematik der Thysanopteran des Harzes (4. Beitrag): *Anaphothrips ferrugineus* Uzel, 1895 und *Anaphothrips sordidus* Uzel, 1895. Entomologische Nachrichten **16**(12): 153-161.

- Schliephake G., Klimt K. (1979): Thysanoptera, Fransenflügler. In Die Tierwelt Deutschlands 66: 5-477. – Jena.
- Strassen, R. zur (2003): Die Terebranten Thysanopteren Europas und des Mittelmeer-Gebietes. - Goecke & Evers, Keltern.
- Trdan S., Andjus L., Strassen zur R. (2003): Chronology of Thripsological Activities and Comparison of Check-Lists on Thysanoptera in Slovenia and FR Yugoslavia. Acta Entomologica Slovenica 11(1): 61-70.
- Zawirska, I. (1988): Thysanoptera collected in Poland. Fragm. faun. Warszawa 31: 361-410.

**ПРВИ НАЛАЗ ВРСТЕ *THERMOTHRIPS MOHELENSIS*
PELIKÁN, 1949 (THYSANOPTERA, THIRIPIDAE) У
СЛОВЕНИЈИ**

HALINA KUCHARCZYK

РЕЗИМЕ

У раду су изнети подаци о налазу врсте *Thermothrips mohelensis* Pelikan, 1949 која је први пут констатована у Словенији и на Балканском полуострву. Приказани су морфолошки карактери, распрострањење, екологија и белешке о таксономском статусу врсте.