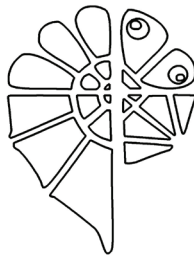


# Bulletin

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# **Biology**

**SPECIES OF THE GENUS *SERICOTHRIPS* AND  
*NEOHYDATOTHRIPS* (THYSANOPTERA: THRIPIDAE)  
IN THE COLLECTION OF THE NATURAL HISTORY  
MUSEUM IN BELGRADE**

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This paper presents the data on specimens of genera *Sericothrips* and *Neohydatothrips* in the collection of the Natural History Museum in Belgrade. Most of these specimens were collected at several localities in Serbia. The paper quotes all relevant data on all collected specimens. Four species belonging to these genera were established in Central Europe, namely: *Sericothrips bicornis*, *Sericothrips staphylinus*, *Neohydatothrips gracilicornis* and *Neohydatothrips abnormis*. Two of them, *S. bicornis* and *Neohydatothrips gracilicornis*, were recorded previously in Serbia. Specimens of species *Sericothrips staphylinus* in the collection of Natural History Museum in Belgrade are the first records of this species in Serbia and the neighboring countries that used to be republics in the former Yugoslavia.

**Key words:** Thysanoptera, *Sericothrips*, *Neohydatothrips*, fauna, Serbia

## INTRODUCTION

The collection of Thysanoptera is one part of the rich Entomological Collection of the Natural History Museum in Belgrade. Its taxonomic analysis has yielded data on the composition of thrips fauna in Serbia and the neighboring regions (Andjus 1997; Trdan *et al.* 2003).

Species belonging to genera *Sericothrips* and *Neohydatothrips* are represented in the Collection by more than 500 specimens. In the classic older literature (Priesner 1964), the four European species were included in the genus *Sericothrips*: *S. circumfusus* Priesner, *S. staphylinus* Haliday, *S. abnormis* Karny and *S. gracilicornis* (Williams). Today some of them are placed in the genus *Neohydatothrips*. According to the excellent book “Die terebrantien Thysanopteren Europas” by zur Strassen (2003), the genus *Sericothrips* contains *S. staphylinus* Haliday and *S. bicornis* (Karny), while *S. gracilicornis* (Williams) and *S. abnormis* (*circumfusus*) (Karny) were placed in the genus *Neohydatothrips* with a few other species from Spain.

In Serbia and in the region of former Yugoslavia, the species from this thrips groups are poorly studied, as is the whole order Thysanoptera. The first data for the territory of Serbia were provided by Kazakov (1927) who reported a record of species *Sericothrips bicornis*, while Morison & Tanasijević (1966) later recorded the species *Sericothrips abnormis* and *S. gracilicornis*. Zur Strassen (1981 & 1984) provided proof for the records of these species in Serbia. The two cited papers by zur Strassen also provide some very important data on fauna of these insects in the territories of the former Yugoslav republics (countries).

## MATERIAL AND METHODS

The Collection of Thysanoptera at the Natural History Museum in Belgrade includes 587 specimens from genera *Sericothrips* and *Neohydatothrips*. Thrips material was collected by the usual entomological methods, primarily by checking and shaking the plants, as well as by the “mowing” or sweeping method. It is important to note that a majority of the material was collected with a sweeping net, proven in this study to be a very efficient method.

We have recorded thrips specimens on the plants from family Fabaceae, belonging to genera *Vicia* sp., *Lathyrus* sp., *Genista* sp. and *Coronilla* sp. There were also several specimens recorded on the plants that do not belong to the Fabaceae family, for example *Echium* sp. and *Galium* sp. This confirmed the well-known fact that thrips visit many different plants, but they feed and reproduce only on certain plant species from certain family.



Fig. 1. - Distribution map of records of *N. gracilicornis* (black dots), *S. staphylinus* (white squares) and *S. bicornis* (gray triangles) from the collections of the Natural History Museum in Belgrade.

With the exception of several specimens collected beforehand, this material was collected during the period 1997-2006. The material originated mostly from various localities in Serbia, while 2 specimens are from Croatia and one is from Hungary.

List of examined localities with UTM marks (10×10 km) (Fig. 1):

|                      |                                      |
|----------------------|--------------------------------------|
| DQ 35 Boljevci       | DQ 64 Vrčin                          |
| DQ 44 Mala Moštanica | DQ 65 Ritopek                        |
| DQ 49 Slankamen      | DQ 65 Beograd, Stepin Gaj            |
| DQ 49 Surduk         | DQ 65 Vinča                          |
| DQ 53 Baćevac        | DQ 66 Veliko Selo                    |
| DQ 53 Barajevo       | DQ 74 Dražanj                        |
| DQ 54 Pinosava       | DQ 98 Deliblatska Peščara, D. Bunar  |
| DQ 55 Resnik         | EQ 82 Djerdap                        |
| DQ 59 Sakule         | WL 90 Zrinjska Gora (Croatia)        |
| DQ 62 Kosmaj         | XL 35 Moslovačka Gora (Croatia)      |
| DQ 63 Popović        | CT 93 Budapest, Nagy Kenej (Hungary) |
| DQ 64 Avala          |                                      |

## RESULTS AND DISCUSSION

Three species were identified in the studied material: *Neohydatothrips gracilicornis*, *Sericothrips bicornis* and *Sericothrips staphylinus*.

*Neohydatothrips gracilicornis* is a species of Palearctic distribution. Its presence in Serbia was first recorded by Morison & Tanasijević (1966) who collected the specimens near Kragujevac and Prokuplje on the plant *Trifolium pratense*. This species is also present in faunas of Slovenia, Croatia and Macedonia (zur Strassen 1981; 1984). This is a herbicolous species associated with plants from family Fabaceae, especially with genus *Vicia* and species *Vicia cracca*.

The collection at the Museum includes 72 males and 494 females of this species (Tab. 1.).

Tab. 1. - Specimens of the *Neohydatothrips gracilicornis* in the Natural History Museum collection.

| Specimens | Locality               | Date       | Metod / Plant |
|-----------|------------------------|------------|---------------|
| 1♀        | Budimpešta, Nagy Kenej | 24.9.1965. | Sweeping net  |
| 2♀        | Beograd, Stepin Gaj    | 4.7.1997.  | Sweeping net  |
| 5♀        | Resnik                 | 16.6.1997. | Sweeping net  |
| 14♀       | Resnik                 | 13.8.1997. | Sweeping net  |

| Specimens | Locality               | Date       | Metod / Plant               |
|-----------|------------------------|------------|-----------------------------|
| 3♀        | Kosmaj                 | 26.8.1997. | Sweeping net                |
| 23 ♀      | Vinča                  | 10.5.1997. | Sweeping net                |
| 7♂, 20♀   | Pinosava               | 24.5.1998. | <i>Vicia cracca</i>         |
| 9♀        | Resnik                 | 16.5.1998. | Sweeping net                |
| 3♀        | Pinosava               | 24.5.1998. | Sweeping net                |
| 6♀        | Kosmaj                 | 6.6.1998.  | Sweeping net                |
| 3♀        | Ritopek                | 20.6.1998. | Sweeping net                |
| 1♂, 1♀    | Djerdap                | 30.7.1998. | Fam. Poaceae                |
| 3♀        | Lepenski Vir           | 1.8.1998.  | Fam. Poaceae                |
| 51♀       | Mala Moštanica         | 25.7.1998. | Sweeping net                |
| 2♀        | Popović                | 8.8.1998.  | Sweeping net                |
| 9♀        | Kosmaj                 | 15.8.1998. | Sweeping net                |
| 14♂       | Vinča                  | 17.7.1999. | <i>Lathyrus tuberosus</i>   |
| 13♂, 30♀  | Vinča                  | 17.7.1999. | Sweeping net                |
| 16♀       | Beograd, Stepin Gaj    | 15.8.1999. | Sweeping net                |
| 1♂, 6♀    | Surduk                 | 21.8.1999. | <i>Lathyrus tuberosus</i>   |
| 1♂, 7♀    | Surduk                 | 21.8.1999. | Sweeping net                |
| 8♀        | Slankamen              | 6.5.2000.  | Sweeping net                |
| 1♂, 16♀   | Kosmaj                 | 27.5.2000. | Sweeping net                |
| 3♂, 70♀   | Kosmaj                 | 27.5.2000. | <i>Lathyrus pratensis</i>   |
| 2♂, 10♀   | Kosmaj                 | 27.5.2000. | <i>Lathyrus tuberosus</i>   |
| 1♀        | Mala Moštanica         | 10.6.2000. | <i>Echium vulgare</i>       |
| 1♀        | Sakule                 | 3.6.2000.  | Sweeping net                |
| 1♀        | Vinča                  | 25.6.2000. | Galium verum                |
| 13♂, 49♀  | Boljevci               | 22.7.2000. | <i>Lathyrus megalanthus</i> |
| 1♀        | Barajevo               | 1.6.2002.  | Sweeping net                |
| 1♀        | Kosmaj                 | 5.6.2002.  | <i>Lathyrus palustris</i>   |
| 1♀        | Kosmaj                 | 5.6.2002.  | <i>Vicia cracca</i>         |
| 1♀        | Kosmaj                 | 5.6.2002.  | Genista tinctoria           |
| 5♂, 5♀    | Kosmaj                 | 5.6.2002.  | Fam. Poaceae                |
| 2♂, 2♀    | Kosmaj                 | 5.6.2002.  | <i>Coronilla varia</i>      |
| 1♀        | Grocka, Dražanj        | 15.6.2002. | Sweeping net                |
| 5♀        | Mala Moštanica         | 22.6.2002. | Sweeping net                |
| 9♀        | Resnik                 | 6.7.2002.  | Sweeping net                |
| 2♀        | Avala, Čarapićev Brest | 3.6.2003.  | <i>Vicia cracca</i>         |
| 1♂, 6♀    | Stari Slankamen        | 28.6.2003. | Sweeping net                |
| 1♀        | Grocka, Vrčin          | 12.6.2004. | Sweeping net                |

| Specimens | Locality                      | Date       | Metod / Plant    |
|-----------|-------------------------------|------------|------------------|
| 5♂, 14♀   | Bačevac                       | 12.7.2004. | <i>Vicia</i> sp. |
| 44♀       | Resnik                        | 24.7.2004. | Sweeping net     |
| 8♀        | Mala Moštanica                | 7.8.2004.  | Sweeping net     |
| 1♀        | Deliblatska Peščara, D. Bunar | 28.5.2005. | Sweeping net     |
| 3♂, 6♀    | Kosmaj                        | 18.6.2005. | Sweeping net     |
| 12♀       | Veliko Selo                   | 8.7.2006.  | Sweeping net     |
| 4♀        | Grocka, Vrčin                 | 29.7.2006. | Sweeping net     |

*Sericothrips bicornis* is distributed throughout Europe. It was recorded for the first time in Serbia in 1927, when Kazakov collected some specimens at Avala (central Serbia) by using the “mowing” method (with a sweeping net). Later, Morison & Tanasijević (1966) also collected the species, than on *Trifolium* sp. in Prokuplje (South Serbia). This species was also recorded in Slovenia, Croatia, Bosnia-Herzegovina and Macedonia (Kovačević 1964; zur Strassen 1984; Andjus 1988/1989). This is the Euro-Siberian herbicolous species, associated with plants from the Fabaceae family, especially with *Lotus corniculatus* and *Trifolium repens*.

In the collection of the Natural History Museum the species *Sericothrips bicornis* is represented by 16 females (Tab. 2.).

Tab. 2. Specimens of the *Sericothrips bicornis* in the Natural History Museum collection.

| Specimens | Locality        | Date       | Metod / Plant |
|-----------|-----------------|------------|---------------|
| 1♀        | Zrinjska Gora   | 1.10.1987. | Sweeping net  |
| 1♀        | Moslovačka Gora | 25.8.1987. | Sweeping net  |
| 1♀        | Kosmaj          | 6.6.1998.  | Sweeping net  |
| 12♀       | Vinča           | 24.6.2000. | Sweeping net  |
| 1♀        | Stari Slankamen | 28.6.2003. | Sweeping net  |

*Sericothrips staphylinus*: Its native distribution is in Western Europe, originally England, France and Portugal. It was not previously recorded either in the territory of Serbia or in the broader region of former Yugoslav countries. This is a floricolous species, and the plant hosts are *Ulex* sp., especially *U. europaeus*.



Five females of the species *Sericothrips staphylinus* in the Museum collection (Tab. 3.) represent the first records of this species in Serbia and other countries that were once republics in the former Yugoslavia.

Tab. 3. Specimens of the *Sericothrips staphylinus* in the Natural History Museum collection.

| Specimens | Locality                      | Date       | Metod / Plant |
|-----------|-------------------------------|------------|---------------|
| 1♀        | Ritopek                       | 20.6.1998. | Sweeping net  |
| 1♀        | Popović                       | 8.8.1998.  | Sweeping net  |
| 3♀        | Deliblatska Peščara, D. Bunar | 19.6.2004. | Sweeping net  |

Three species belonging to genera *Sericothrips* and *Neohydatothrips* are represented in the Thysanoptera Collection of the Natural History Museum in Belgrade.

Two of them, *S. bicornis* and *N. gracilicornis*, were recorded previously in Serbia. Specimens of species *S. staphylinus* are the first records of this species in Serbia and the neighboring countries that used to be republics in former Yugoslavia.

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**ВРСТЕ РОДОВА**  
***SERICOTHRIPS* И *NEOHYDATOTHRIPS***  
**(THYSANOPTERA: THRIPIDAE) У ЗБИРЦИ**  
**ПРИРОДЊАЧКОГ МУЗЕЈА У БЕОГРАДУ**

ЉИЉАНА АНЂУС, СТАНИСЛАВ ТРДАН, МИЛОШ ЈОВИЋ

РЕЗИМЕ

У раду је представљен материјал трипса родова *Sericothrips* и *Neohydatothrips* у збирци Природњачког музеја у Београду. Више од 500 примерака врста *Sericothrips bicornis*, *Sericothrips staphylinus* и *Neohydatothrips gracilicornis* сакупљено је углавном на разним локалитетима у Србији. Наведени су подаци о локалитету, датуму и начину сакупљања за све обрађене примерке. Врсте *Sericothrips bicornis* и *Neohydatothrips gracilicornis* биле су и раније констатоване у Србији. Примерци врсте *Sericothrips staphylinus* у музејској збирци представљају прве налазе ове врсте у Србији и околним земљама насталим од бивших југословенских република.

Познато је да су четири врсте ових родова констатоване у централној Европи, и то *Sericothrips bicornis*, *Sericothrips staphylinus*, *Neohydatothrips gracilicornis* и *Neohydatothrips abnormis*.