FIRST RECORD OF PSEUDOCLERUCHUS DONEV & HUBER (HYMENOPTERA: CHALCIDIOIDEA: MYMARIDAE) IN ROMANIA, WITH NOTES ON CLERUCHUS ENOCK

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Abstract. In this paper we present Pseudocleruchus Donev & Huber, a new genus to the Romanian fauna. We compare the genus Pseudocleruchus with Cleruchus Enock, mentioning the most evident differentiation characters, also giving notes on Cleruchus group of genera. We propose to change the diagnosis for the genus Pseudocleruchus Donev & Huber, because the forewings are different in our specimen, compared with the original description.

Keywords: Pseudocleruchus Donev & Huber, distribution, taxonomy, first record, Romania.

Rezumat. Prima semnalare a genului Pseudocleruchus Donev & Huber din România, cu note referitoare la genul Cleruchus Enock. În această lucrare prezentăm genul Pseudocleruchus Donev & Huber, semnând cele mai evidente caractere de diferențiere dintre acestea, dâm și note asupra grupului de genuri apropiate de Cleruchus. Propunem schimbarea diagnozei genului Pseudocleruchus Donev & Huber, deoarece aripile anterioare ale specimului colectat de noi diferă față de descrierea anterioară.

Cuvinte cheie: Pseudocleruchus Donev & Huber, distribuție, taxonomie, prima semnalare, România.

Introduction
The Mymaridae are all believed to be internal, primary parasites, especially of insect eggs. There are more than 1400 described species of Mymaridae, grouped in more than 100 genera. In Europe are more than 400 valid species (Noyes, 2011).

Previous contributions to the study of Mymaridae diversity in Romania have been published by Pricop (2008, 2009, 2010a, 2010b), Pricop & Andriescu (2011).

Material and methods
This paper is a result of an entomological survey in Iasi. The material was collected with an entomological sweep-net from the vegetation. The specimens were mounted in Canada balm and examined with an optical microscope. Some morphological characters were illustrated using a digital camera attached to the microscope. Morphological terms follow Noyes (2011). Abbreviations: coll. = collected; Leg. = the collector; ovp. = ovipositor.

Results and discussion
Both Pseudocleruchus Donev & Huber, 2002 (Fig. 1) and Cleruchus Enock, 1909 belong to the “Cleruchus group of genera”, characterized by: body flattened dorso-ventrally; face in lateral view usually strongly angular, receding abruptly below toruli to mouth; stigmal vein usually widened, sometimes wider than long; funicle segments often quadrate to wider than long, but also longer than wide; ocelli when present often in low and wide triangle with the lateral ocelli almost touching eye margins; mesosoma often depressed; fore wing often narrow with parallel sides, but sometimes wider (diverging sides); legs short, femora slightly swollen; ovipositor often very short, originating in
apical half of gaster but also in some cases long. Male genitalia with parameres and digitus volselaris wearing teeth. In “Cleruchus group of genera” are included 9 valid genera. In Table 1 we present some differentiating characters between the two genera mentioned above, recorded until now, from Romania. Pricop (2010a) mentioned and illustrated Cleruchus plateus collected from Moldova (Romania).

We treat here Cleruchus (Cleruchus) as different from Cleruchus (Eucleruchus) (the characters that separate Cleruchus Enoch by Eucleruchus Ogoblin are related to the radicle that is fused with the scape in Eucleruchus and not fused in Cleruchus; the clava (antennal club) is entire in both Cleruchus and Eucleruchus). In Cleruchus, the characters of scape should be considered as subgenus characters or at least species group characters.

<table>
<thead>
<tr>
<th>No.</th>
<th>Character</th>
<th>Cleruchus (Cleruchus)</th>
<th>Pseudocleruchus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Antennae</td>
<td>- clava entire (1-segmented);</td>
<td>- clava 3-segmented;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- radicle distinctly separated from scape</td>
<td>- radicle fused with the scape</td>
</tr>
<tr>
<td>2</td>
<td>Fore wings</td>
<td>- forewing, when present, parallel-sided and with few microtrichia</td>
<td>- forewing with anterior and posterior margins diverging and also with parallel margins and with numerous microtrichia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- stigmal vein usually wider than marginal vein</td>
<td>- stigmal vein not wider than marginal vein</td>
</tr>
<tr>
<td>3</td>
<td>Metasoma and mesosoma inner structures</td>
<td>- phragma not extending into gaster</td>
<td>- phragma extending into gaster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ovp. short, arising in apical third of gaster</td>
<td>- ovp. long, longer than half of gaster</td>
</tr>
</tbody>
</table>

_Pseudocleruchus_ Donev & Huber, 2002

_Diagnosis:_ Clava 3-segmented (Fig. 1b); radicle fused with scape; funicle 6-segmented (Fig. 1b); ocellar triangle relatively high; stemmaticum trapezoidal and indicated by pale markings; mandibles small and difficult to observe, (mandibles are with 2 teeth in Cleruchus); prosternum apparently entire; stigmal vein not wider than marginal vein; forewings with anterior and posterior margins diverging (not parallel-sided) and with relatively numerous microtrichia in Pseudocleruchus triclavatus, but parallel sided in our specimen of Pseudocleruchus sp.; mesophragma extending into gaster; abdomen sessile, petirole indistinct.

Our specimen of _Pseudocleruchus_ sp. (Fig. 1) is different from _Pseudocleruchus triclavatus_ Donev & Huber, 2002. _Pseudocleruchus_ is very rare and is mentioned here for the first time from Romania.

![](image-a.png)

**Figure 1.** Female of _Pseudocleruchus_ sp.: a – species habitus; b – antenna (original).

_Pseudocleruchus_ sp. (Fig. 1a, b)

**Material examined:** 1♀ coll. on 10.VII.2011, from Miroslava (Iaşi county),
Moldova (Romania), Leg.: E. Pricop.

**Hosts:** Unknown.

**Distribution:** Bulgaria and now Romania.

**Note:** We propose that the diagnosis for the genus must be changed, because the fore wings are narrow in our specimen of *Pseudocleruchus* sp., like in *Cleruchus*; the other characters mentioned above are specific for this genus. The characters forewing not parallel-sided (forewing margins diverging) and with relatively numerous microtrichia, are present until now only in *Pseudocleruchus triclavatus*. We did not have the opportunity to examine the type material of *P. triclavatus*.


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**References**


