

## Taxonomic changes inside Hyperini (Coleoptera: Curculionidae: Hyperinae)

by

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with 15 photographs, 5 maps

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**Abstract.** *Hypera mariei* (Hoffmann, 1933) was identified as new synonym of *Hypera postica* (Gyllenhal, 1813). Lectotypes and paralectotypes for the following species are designated and illustrated: *Hypera dapalis* (Boheman, 1834), *Hypera striata* (Boheman, 1834) and *Donus chlorocomus* (Boheman, 1842).

### Keywords

Taxonomy, Coleoptera, Curculionidae, Hyperini, new synonym, lectotypes, paralectotype, Palaearctic region.

## Introduction

The tribe Hyperini has been allocated several important taxonomic, morphological and ecological papers in the last ten years [Alonso-Zarazaga & Lyal 1999, 2002] [Winkelman 2001, 2006] [Alonso-Zarazaga 2005] [Skuhrovec 2005, 2006a,b, 2007, 2008, 2009] [Legalov 2007] [Skuhrovec & Borovec 2007] [Winkelman & Bayer 2007] [Skuhrovec & Winkelman 2008]. The last comprehensive and important taxonomic changes were published by Skuhrovec [Skuhrovec 2008].

The last two comprehensive revisions of Caucasian *Donus* species [Skuhrovec & Borovec 2007] and subgenus *Dapalinus* [Skuhrovec & Winkelman 2008] included undesignated lectotypes of some species, e.g. *Hypera dapalis* (Boheman, 1834), *Hypera striata* (Boheman, 1834) and *Donus chlorocomus* (Boheman, 1842).

This paper corrected the commented imperfections from the previous papers and brings a new taxonomic view at the valid name *Hypera mariei* (Hoffmann, 1933).

## Taxonomic changes and accessories

### *Hypera postica* (Gyllenhal, 1813)

[Tab. HposF]

**Original description:** *Rhynchaenus posticus* Gyllenhal, 1813 [Gyllenhal 1813].

**Synonyme:** = *Curculio haemorrhoidalis* Herbst, 1784; homonym of *Haplonyx haemorrhoidalis* (Fabricius, 1775)

1777)

= *Curculio variabilis* Herbst, 1795; homonym of *Hypera nigrirostris* (Fabricius,

(Fabricius, 1787)

= *Curculio bimaculatus* Marsham, 1802; homonym of *Notaris bimaculatus*

= *Phytonomus picipes* Curtis, 1826

- = *Phytonomus sublineatus* Curtis, 1826
  - = *Phytonomus villosulus* Curtis, 1826
  - = *Phytonomus phaeopus* Stephens, 1831
  - = *Phytonomus rufipes* Stephens, 1831
  - = *Phytonomus parvus* Gyllenhal, 1834
  - = *Phytonomus tibialis* Hochhuth, 1851
  - = *Phytonomus sericeus* Capiomont, 1868
  - = *Phytonomus siculus* Capiomont, 1868
  - = *Phytonomus brevipes* Desbrosher, 1875
  - = *Phytonomus decoratus* Petri, 1901
  - = *Phytonomus austriacus* Petri, 1901
  - = *Phytonomus decoratus* Petri, 1901
  - = *Phytonomus mariei* Hoffmann, 1933 **syn. nov.** [Hoffmann 1933]
- Literature: [Tempere&Pericart 1989pos]

Habitus [Fig. Hpos1F]  
 Distribution (in western Palaearctic region) [Fig. DaHpos]

## Synonyme

= ***Hypera mariei* (Hoffmann, 1933)**  
 [Tab. HmarF]

Original description: *Phytonomus mariei* Hoffmann, 1933 [Hoffmann 1933]  
 Literature: [Hoffmann 1954key] [Hoffmann 1954mar] [Tempere&Pericart 1989mar]  
 Locus Typicus: "Laredré", Basses Alpes (France)  
 Length (without rostrum): 5.1 mm (Type).

The **DWD** project (*Hypera* / *Limobius* / *Metadonus*) in this SNUDEBILLER 10 edition gives a review of all species in the 'Transalpina' region including type material of the rare species. The type (female) of *Hypera mariei* (Hoffmann, 1933) is deposited in the Muséum National d'Histoire Naturelle in Paris. The type of this species was compared with other *Hypera* species in particular of the species of the group *Hypera postica*. Hoffmann [Hoffmann 1954] advertises that *Hypera mariei* is probably a synonym of *Hypera postica* or *Hypera melancholica*. After comparing *Phytonomus mariei* Hoffmann, 1933 with many varieties of *Hypera postica*, I arrive to the conclusion that this species is a younger synonym of *Phytonomus posticus* Gyllenhal, 1813.

### Lectotype of *Hypera mariei* (Hoffmann, 1933) and its illustration

Habitus (female) [Fig. Hmar1F]  
 Distribution [Fig. DaHmar]

### Type material.

**1 F** collection Museum National D' Histoire Naturelle in Paris: "Laredré / Basses Alpes" // "Phytonomus / Mariei / Hoffmann" // "abdomen .. / ..... anal de / Ph. Mariei ...." // "M. / Marié" // "Typus" (red label) // "MUSEUM PARIS / 1968 / Col. A. HOFFMANN" // "Synonyme of / Hypera postica / (Gyllenhal, 1813) / by J. Skuhrovec 2009" (red label).

The description of the species [Hoffmann 1933] is based on two females. Muséum National d'Histoire Naturelle in Paris has deposited only one type of *Hypera mariei*

(Hoffmann, 1933). The lectotype of *Hypera mariei* (Hoffmann, 1933) was not designated yet. The Lectotype is designated and illustrated here and the mentioned imperfection is corrected now. The second type is missing.

**These:** *Phytonomus mariei* Hoffmann, 1933 is a junior synonym of *Rhynchaenus posticus* Gyllenhal, 1813.

**Reason:** Unfortunately, the lectotype (female) is quite damaged. Pronotum and elytrae are almost without scales. This induces a problematic identification because the shape of scales is an important character for identification. However the shape of rostrum [Fig. Hpos1F] [Fig. Hmar1F] and other characters (shape of pronotum, elytrae etc.) support that it is only a junior synonym of *Hypera postica* and no a valid species.

Spermatheca and 8<sup>th</sup> sternite of lectotype are not represented by photos because someone preserved the abdomen and destroyed all inner structures.

### ***Hypera dapalis* (Boheman, 1834)**

[Tab. HdapF]

**Original description:** *Phytonomus dapalis* Boheman, 1834 [Boheman 1834dap]  
**Literature:** [Capiomont 1868dap] [Capiomont 1868key] [Petri 1901dap] [Petri 1901key]  
[Skuhrovec 2006key] [Skuhrovec&Winkelmann 2008dap]  
[Skuhrovec&Winkelmann 2008key]  
**Locus Typicus:** Algeria

#### **Designation of lectotype and its illustration**

Habitus (female) [Fig. Hdap1F]  
Spermatheca [Fig. Hdap12]  
8<sup>th</sup> sternite (female) (damaged) [Fig. Hdap14F]  
Distribution [Fig. DaHdap]

#### **Type material.**

**1 F** collection Naturhistoriska Riksmuseet in Stockholm: "Paykull / n. 166 / Algier" (yellow label) // "Typus" (red label) // "Naturhistoriska / Riksmuseet / Stockholm / Loan no 1004/03" (yellow label) // "NRM Sthlm / Loan 2624/08" (green label) // "Lectotypus / *Hypera dapalis* / (Boheman, 1834) / design. J. Skuhrovec 2009" (red label).

The lectotype of *Hypera dapalis* (Boheman, 1834) was not designated in the last revision of the subgenus *Dapalinus* [Skuhrovec & Winkelmann 2008]. The Lectotype is designated and illustrated here and the mentioned imperfection is corrected now.

Even though the specimen has already been labeled as "TYPUS", it is necessary to fix it as a lectotype, because Boheman availabled an undefinte number of specimens (syntypes) in his first description. Labels "TYPUS" (red label) in Naturhistoriska Riksmuseet in Stockholm was done by the previous curators without any knowledges about each species and its taxonomy. They chose one specimen from the box and give them "TYPUS"-labels (Viklund, pers. comm.).

## ***Hypera striata* (Boheman, 1834)**

[Tab. HstrF]

- Original description:** *Phytonomus striatus* Boheman, 1834 [Boheman 1834str]  
**Synonyme:** = *Phytonomus Karamani* Stierlin, 1886 [Stierlin 1886]; synonymize by [Petri 1901str202]  
= *Phytonomus solymitanus* Faust, 1887 [Faust 1887]; synonymize by [Csiki 1934str]  
= *Phytonomus ab. sicilianus* Petri, 1901 [Petri 1901str]; synonymize by [Csiki 1934str]
- Literature:** [Capiomont 1868str] [Capiomont 1868key] [Petri 1901str] [Petri 1901key] [Skuhrovec 2006key] [Skuhrovec&Winkermann 2008dap] [Skuhrovec&Winkermann 2008key]
- Locus Typicus:** Banatu (geographical and historical region in Central Europe currently divided between three countries: the eastern part lies in Romania (the counties of Timis, Caraş-Severin, Arad south of the Mures/Maros river, and Mehedinti), the western part in Serbia (the Serbian Banat, mostly included in the Vojvodina region, except for a small part included in Central Serbia), and a small northern part in Hungary (Csongrád county).

### **Designation of lectotype and its illustration**

- Habitus (female) [Fig. Hstr1F]  
Spermatheca [Fig. Hstr12]  
8<sup>th</sup> sternite (female) [Fig. Hstr14F]  
Distribution [Fig. DaHstr]

### **Type material.**

**1 F** collection Naturhistoriska Riksmuseet in Stockholm: “Hyp. striata / Sturm / Banatu n. Sturm“ // “Typus“ (red label) // “Naturhistoriska / Riksmuseet / Stockholm / Loan no 1005/03“ (yellow label) // “NRM Sthlm / Loan 2632/08“ (green label) // “Lectotypus / *Hypera striata* / (Boheman, 1834) / design. J. Skuhrovec 2009” (red label).

The lectotype of *Hypera striata* (Boheman, 1834) was not designated in the last revision of the subgenus *Dapalinus* [Skuhrovec & Winkermann 2008]. The Lectotype is designated and illustrated here and the mentioned imperfection is corrected now.

Even though the specimen has already been labeled as “TYPUS“, it is necessary to fix it as a lectotype, because Boheman availabled an undefinte number of specimens (syntypes) in his first description. Labels “TYPUS“ (red label) in Naturhistoriska Riksmuseet in Stockholm was done by the previous curators without any knowledges about each species and its taxonomy. They chose one specimen from the box and give them “TYPUS“-labels (Viklund, pers. comm.).

## ***Donus chlorocomus* (Boheman, 1842)**

[Tab. DchlF]

- Original description:** *Hypera chlorocoma* Boheman, 1842 [Boheman 1842chl]  
**Literature:** [Petri 1901chl] [Petri 1901key] [Skuhrovec&Borovec 2007chl] [Skuhrovec&Borovec 2007key]  
**Locus Typicus:** Persia occidentalis

## Designation of lectotype and its illustration

Habitus (female)	[Fig. Dchl1F]
Spermatheca	[Fig. Dchl12]
8 <sup>th</sup> sternite (female) (missing)	
Distribution	[Fig. DaDchl]

## Type material.

**1 F** collection Naturhistoriska Riksmuseet in Stockholm: “Persia / Falderm.” // “229/89” (red label) // “Typus” (red label) // “Riksmuseum / Stockholm” (green label) // “NRM Sthlm / Loan 2614/08” (green label) // “Lectotypus / *Donus chlorocomus* / (Boheman, 1834) / design. J. Skuhrovec / & R. Borovec 2009” (red label)

**1 F** collection Museum National D Histoire Naturelle in Paris: “Persia / Falderm.” // “230/89” (red label) // “Paratypus” (red label) // “Riksmuseum / Stockholm” (green label) // “NRM Sthlm / Loan 2615/08” (green label) // “Paralectotypus / *Donus chlorocomus* / (Boheman, 1834) / design. J. Skuhrovec / & R. Borovec 2009” (red label).

The lectotype and paralectotype of *Donus chlorocomus* (Boheman, 1842) were not designated in the last revision of the caucasian *Donus* species [Skuhrovec & Borovec 2007]. It is designated and illustrated here and the mentioned imperfection is corrected now.

Even though the specimen has already been labeled as “TYPUS” and/or “PARATYPUS”, it is necessary to fix it as a lectotype. Labels “Typus” (red label) in Naturhistoriska Riksmuseet in Stockholm was done by the previous curators without any knowledge about each species and its taxonomy. They chose one specimen from the box and give them “TYPUS”-labels (Viklund, pers. comm.).

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